```
=> => d que stat 166
L10 ( 1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
L11 SEL PLU=ON L10 1- RN : 16 TERMS
L11
            16 SEA FILE=REGISTRY ABB=ON PLU=ON L11
8 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND PMS/CI
L12
L13
           298 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-39-8/RN, CRN
L14
           1033 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-54-0/RN, CRN
L15
            70 SEA FILE=REGISTRY ABB=ON PLU=ON 7757-79-1/RN,CRN 6 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT (L14 OR L15)
L16
L17
                OUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?P
L18
                ARTICLE OR MICROPARTICLE OR NANOPARTICLE OR ?PARTICUL? OR
                MICROPARTICUL? OR NANOPARTICUL? OR ?GRANUL? OR MICROGRAN
               UL? OR NANOGRANUL?
               QUE ABB=ON PLU=ON SILVER OR AG
L19
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
L21 (
               SEL PLU=ON L21 1- RN : 16 TERMS
            16) SEA FILE=REGISTRY ABB=ON PLU=ON L22
            6 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND AG/ELS
                QUE ABB=ON PLU=ON L24
L25
                QUE ABB=ON PLU=ON L17
L26
          4574 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L26
          139 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND (L14 OR L15)
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND L16
                QUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?S
                PHER? OR MICROSPHER? OR NANOSPHER?
             11 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND L39
              5 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 AND PHARM?/SC,SX
        166867 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYMERS+PFT,OLD/CT
            308 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 (L) L19
             62 SEA FILE=HCAPLUS ABB=ON PLU=ON L53 AND (L18 OR L39)
             7 SEA FILE=HCAPLUS ABB=ON PLU=ON L53 AND ?DELIVER?
             65 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 OR L59
L60
              9 SEA FILE=HCAPLUS ABB=ON PLU=ON L60 AND PHARM?/SC,SX
L61
                QUE ABB=ON PLU=ON "DRUG DELIVERY SYSTEMS"+PFT,OLD,NT/C
L63
             6 SEA FILE-HCAPLUS ABB=ON PLU=ON L53 AND L63
L64
             15 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 OR L50 OR L61 OR L64
L65
            13 SEA FILE=HCAPLUS ABB=ON PLU=ON L65 AND (AY<2004 OR PY<2004
L66
                OR PRY<2004 OR MY<2004 OR REVIEW/DT)
=> d que stat 182
                OUE ABB=ON PLU=ON ((P1752 OR P1741)(P) S1467)/PLE
L73
                OUE ABB=ON PLU=ON ((P1343 OR P1150)(P)S1467)/PLE
L74
               OUE ABB=ON PLU=ON A547/M0, M1, M2, M3, M4, M5, M6
L76
             26 SEA FILE=WPIX ABB=ON PLU=ON L76 AND (L73 OR L74)
            4 SEA FILE=WPIX ABB=ON PLU=ON L77 AND A61?/IPC
L79
L81
            O SEA FILE=WPIX ABB=ON PLU=ON L77 AND R01851/PLE
L82 4 SEA FILE=WPIX ABB=ON PLU=ON L79 OR L81
=> d his 186
     (FILE USPATFULL, USPAT2 ENTERED AT 10:29:07 ON 06 FEB 2006)
             34 S L85 AND (AY<2004 OR PY<2004 OR PRY<2004)
=> d que stat 186
              1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
L10 (
               SEL PLU=ON L10 1- RN :
                                            16 TERMS
L11
             16 SEA FILE=REGISTRY ABB=ON PLU=ON L11
L12
```

```
L13
              8 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND PMS/CI
L14
           298 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-39-8/RN, CRN
L15
          1033 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-54-0/RN, CRN
L17
              6 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT (L14 OR L15)
               OUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?P
L18
               ARTICLE OR MICROPARTICLE OR NANOPARTICLE OR ?PARTICUL? OR
                MICROPARTICUL? OR NANOPARTICUL? OR ?GRANUL? OR MICROGRAN
               UL? OR NANOGRANUL?
               OUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?S
L39
                PHER? OR MICROSPHER? OR NANOSPHER?
          64751 SEA L17
L83
             38 SEA L83 AND A61K033-38/IPC
L84
             36 SEA L84 AND (L18/TI, IT, CC, CT, ST, STP, BI OR L39/TI, IT, CC, CT, ST, ST
L85
               P,BI)
            34 SEA L85 AND (AY<2004 OR PY<2004 OR PRY<2004)
L86
=> d que stat l118
L10 (
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
               SEL PLU=ON L10 1- RN: 16 TERMS
L11
            16 SEA FILE=REGISTRY ABB=ON PLU=ON L11
L12
             8 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND PMS/CI
L13
           298 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-39-8/RN, CRN
L14
          1033 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-54-0/RN, CRN
L15
            70 SEA FILE=REGISTRY ABB=ON PLU=ON 7757-79-1/RN, CRN
L16
             6 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT (L14 OR L15)
L17
               QUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?P
L18
               ARTICLE OR MICROPARTICLE OR NANOPARTICLE OR ?PARTICUL? OR
                MICROPARTICUL? OR NANOPARTICUL? OR ?GRANUL? OR MICROGRAN
               UL? OR NANOGRANUL?
L19
               QUE ABB=ON PLU=ON SILVER OR AG
               QUE ABB=ON PLU=ON ?POLYMER? OR HOMOPOLYMER? OR POLYPRO
L20
               PYLEN? OR POLYSTYREN? OR POLYETHYLEN? OR PET
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
L21 (
               SEL PLU=ON L21 1- RN:
                                             16 TERMS
L22
            16) SEA FILE=REGISTRY ABB=ON PLU=ON L22
L23 (
             6 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND AG/ELS
L24
               QUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?S
L39
               PHER? OR MICROSPHER? OR NANOSPHER?
        429132 SEA FILE=MEDLINE ABB=ON PLU=ON POLYMERS+PFT,OLD,NT/CT
L90
          7042 SEA FILE=MEDLINE ABB=ON PLU=ON SILVER+PFT,OLD,NT/CT
L91
               SEL PLU=ON L24 1- CHEM :
L92
                                             227 TERMS
        201576 SEA FILE=MEDLINE ABB=ON PLU=ON L92
L93
          1953 SEA FILE=MEDLINE ABB=ON PLU=ON L17
L94
          9738 SEA FILE=MEDLINE ABB=ON PLU=ON (L90 OR L94) AND (L91 OR L93)
L95
L96
           506 SEA FILE=MEDLINE ABB=ON PLU=ON L19 (10A) L20
          7887 SEA FILE=MEDLINE ABB=ON PLU=ON L20 (15A) (L18 OR L39)
L97
            81 SEA FILE=MEDLINE ABB=ON PLU=ON L95 AND L96
L98
            10 SEA FILE=MEDLINE ABB=ON PLU=ON L98 AND L97
L99
             O SEA FILE=MEDLINE ABB=ON PLU=ON L98 AND (L14 OR L15 OR L16)
L100
            10 SEA FILE=MEDLINE ABB=ON PLU=ON L99 OR L100
L101
             2 SEA FILE=MEDLINE ABB=ON PLU=ON L98 AND ?DEXTRAN?
L102
             1 SEA FILE=MEDLINE ABB=ON PLU=ON L98 AND ((A-DEXTRAN/BI
L106
               OR CDC-H/BI OR "DEX 500"/BI OR "DEXTRAN B 512"/BI OR "DEXTRAN
               B1355"/BI OR "DEXTRAN D 10"/BI OR "DEXTRAN PL 1S"/BI OR
               "DEXTRAN PT 25"/BI OR "DEXTRAN PVD"/BI OR "DEXTRAN RMI"/BI OR
                "DEXTRAN T 10"/BI OR "DEXTRAN T 110"/BI OR "DEXTRAN T 150"/BI
               OR "DEXTRAN T 20"/BI OR "DEXTRAN T 2000"/BI OR "DEXTRAN T
               500"/BI OR "DEXTRAN T 70"/BI OR "DEXTRAN 1.5"/BI OR "DEXTRAN
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10"/BI OR "DEXTRAN 1000"/BI OR "DEXTRAN 10000"/BI OR "DEXTRAN 110"/BI OR "DEXTRAN 15"/BI OR "DEXTRAN 150"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 250"/BI OR "DEXTRAN 3000"/BI OR "DEXTRAN 40"/BI OR "DEXTRAN 40000"/BI OR "DEXTRAN 45"/BI OR "DEXTRAN 500"/BI OR "DEXTRAN 60"/BI OR "DEXTRAN 70"/BI OR "DEXTRAN 75"/BI OR DEXTRAN/BI OR DEXTRANEN/BI OR DEXTRANS/BI OR DEXTRAN/BI OR EUDEXTRAN/BI OR EXPANDEX/BI OR "G 75"/BI OR GENTRAN/BI OR HMODEX/BI OR HYSKON/BI OR INFUCOLL/BI OR INTRADER/BI OR INTRADEX/BI OR LMD/BI OR LMD/BI)

L107

O SEA FILE=MEDLINE ABB=ON PLU=ON L98 AND (("ACP 10"/BI OR "AGENT AT 717"/BI OR "AGRIMER K 30"/BI OR "AGRIMER 15"/BI OR "AGRIMER 30"/BI OR "AGRIMER 90"/BI OR "ALBIGEN A"/BI OR "ALDACOL O"/BI OR "ANTARON P 804"/BI OR "ANTITOX VANA"/BI OR "AT 717"/BI OR "B 7509"/BI OR BOLINAN/BI OR "CEVIAN A 88036"/BI OR "DISCOL K 30L"/BI OR "DISINTEX 200"/BI OR "DIVERGAN EF"/BI OR "DIVERGAN F"/BI OR "DIVERGAN RS"/BI OR "GAFTEX AE-K 15"/BI OR "GANEX P 804"/BI OR HEMODESIS/BI OR HEMODEZ/BI OR "K 115 (VINYL POLYMER) "/BI OR "K 115"/BI OR "K 12"/BI OR "K 120 (VINYL POLYMER) "/BI OR "K 120"/BI OR "K 15 (POLYMER) "/BI OR "K 15"/BI OR "K 17"/BI OR "K 25 (SURFACTANT)"/BI OR "K 25"/BI OR "K 29-32"/BI OR "K 30"/BI OR "K 30C"/BI OR "K 60 (POLYMER)"/BI OR "K 60"/BI OR "K 85 (VINYL POLYMER)"/BI OR "K 85"/BI OR "K 90"/BI OR "K 92 (VINYL POLYMER)"/BI OR "K 92"/BI OR "1-VINYL-2-PYRROLIDINONE POLYMER"/BI OR "1-VINYL-2-PYRROLIDONE HOMOPOLYMER "/BI OR "1-VINYL-2-PYRROLIDONE POLYMER"/BI OR 143RP/BI OR "2-PYRROLIDINONE, 1-ETHENYL-, HOMOPOLYMER"/BI OR "2-PYRROLIDINO NE, 1-VINYL-, POLYMERS"/BI OR "40K (VINYL POLYMER)"/BI OR 40K/BI))

L108

0 SEA FILE=MEDLINE ABB=ON PLU=ON L98 AND ((COLLO-BO/BI OR "E 252"/BI OR NITER/BI OR NITRE/BI OR "NITRIC ACID POTASSIUM SALT (1:1)"/BI OR "NITRIC ACID POTASSIUM SALT"/BI OR "NITRIC ACID, POTASSIUM SALT"/BI OR "POTASSIUM NITRATE"/BI OR SALTPETER/BI))
11 SEA FILE=MEDLINE ABB=ON PLU=ON L99 OR L100 OR L101 OR L102

L109

33 SEA FILE=MEDLINE ABB=ON PLU=ON L96 AND L97

1 SEA FILE=MEDLINE ABB=ON PLU=ON L110 AND ?DEXTRAN?

OR (L106 OR L107 OR L108)

LMWD/BI))

L110 L111 L112

O SEA FILE=MEDLINE ABB=ON PLU=ON L110 AND ((A-DEXTRAN/BI OR CDC-H/BI OR "DEX 500"/BI OR "DEXTRAN B 512"/BI OR "DEXTRAN B1355"/BI OR "DEXTRAN D 10"/BI OR "DEXTRAN PL 1S"/BI OR "DEXTRAN PT 25"/BI OR "DEXTRAN PVD"/BI OR "DEXTRAN RMI"/BI OR "DEXTRAN T 10"/BI OR "DEXTRAN T 110"/BI OR "DEXTRAN T 150"/BI OR "DEXTRAN T 20"/BI OR "DEXTRAN T 2000"/BI OR "DEXTRAN T 500"/BI OR "DEXTRAN T 70"/BI OR "DEXTRAN 1.5"/BI OR "DEXTRAN 10"/BI OR "DEXTRAN 1000"/BI OR "DEXTRAN 110"/BI OR "DEXTRAN 15"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 250"/BI OR "DEXTRAN 3000"/BI OR "DEXTRAN 40"/BI OR "DEXTRAN 40000"/BI OR "DEXTRAN 45"/BI OR "DEXTRAN 500"/BI OR "DEXTRAN 60"/BI OR "DEXTRAN 70"/BI OR "DEXTRAN 75"/BI OR DEXTRAN/BI OR EXPANDEX/BI OR DEXTRAN/BI OR EXPANDEX/BI OR

L113

0 SEA FILE=MEDLINE ABB=ON PLU=ON L110 AND (("ACP 10"/BI OR "AGENT AT 717"/BI OR "AGRIMER K 30"/BI OR "AGRIMER 15"/BI OR "AGRIMER 30"/BI OR "AGRIMER 90"/BI OR "ALBIGEN A"/BI OR "ALDACOL Q"/BI OR "ANTARON P 804"/BI OR "ANTITOX VANA"/BI OR "AT 717"/BI OR "B 7509"/BI OR BOLINAN/BI OR "CEVIAN A 88036"/BI OR "DISCOL K 30L"/BI OR "DISINTEX 200"/BI OR "DIVERGAN EF"/BI

"G 75"/BI OR GENTRAN/BI OR HEMODEX/BI OR HYSCON/BI OR HYSKON/BI OR INFUCOLL/BI OR INTRADER/BI OR INTRADEX/BI OR LMD/BI OR

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OR "DIVERGAN F"/BI OR "DIVERGAN RS"/BI OR "GAFTEX AE-K 15"/BI
               OR "GANEX P 804"/BI OR HEMODESIS/BI OR HEMODEZ/BI OR "K 115
                (VINYL POLYMER) "/BI OR "K 115"/BI OR "K 12"/BI OR "K 120
                (VINYL POLYMER) "/BI OR "K 120"/BI OR "K 15 (POLYMER) "/BI OR "K
               15"/BI OR "K 17"/BI OR "K 25 (SURFACTANT)"/BI OR "K 25"/BI OR
               "K 29-32"/BI OR "K 30"/BI OR "K 30C"/BI OR "K 60 (POLYMER)"/BI
               OR "K 60"/BI OR "K 85 (VINYL POLYMER)"/BI OR "K 85"/BI OR "K
               90"/BI OR "K 92 (VINYL POLYMER)"/BI OR "K 92"/BI OR "1-VINYL-2-
               PYRROLIDINONE POLYMER"/BI OR "1-VINYL-2-PYRROLIDONE HOMOPOLYMER
                "/BI OR "1-VINYL-2-PYRROLIDONE POLYMER"/BI OR 143RP/BI OR
                "2-PYRROLIDINONE, 1-ETHENYL-, HOMOPOLYMER"/BI OR "2-PYRROLIDINO
               NE, 1-VINYL-, POLYMERS"/BI OR "40K (VINYL POLYMER)"/BI OR
               40K/BI))
             O SEA FILE=MEDLINE ABB=ON PLU=ON L110 AND ((COLLO-BO/BI OR "E
L114
               252"/BI OR NITER/BI OR NITRE/BI OR "NITRIC ACID POTASSIUM SALT
                (1:1) "/BI OR "NITRIC ACID POTASSIUM SALT"/BI OR "NITRIC ACID,
               POTASSIUM SALT"/BI OR "POTASSIUM NITRATE"/BI OR SALTPETER/BI))
            34 SEA FILE=MEDLINE ABB=ON PLU=ON (L109 OR L110 OR L111 OR L112
L115
               OR L113 OR L114)
            33 SEA FILE=MEDLINE ABB=ON PLU=ON L115 AND (L18 OR L39)
L116
            34 SEA FILE=MEDLINE ABB=ON PLU=ON L115 OR L116
L117
            15 SEA FILE=MEDLINE ABB=ON PLU=ON L117 AND (AY<2004 OR PY<2004
1.118
               OR PRY<2004 OR MY<2004 OR REVIEW/DT)
=> d que stat 1141
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
L10 (
               SEL PLU=ON L10 1- RN: 16 TERMS
L11
            16 SEA FILE=REGISTRY ABB=ON PLU=ON L11
L12
             8 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND PMS/CI
L13
           298 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-39-8/RN, CRN
L14
          1033 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-54-0/RN, CRN
L15
             6 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT (L14 OR L15)
L17
               QUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?P
L18
               ARTICLE OR MICROPARTICLE OR NANOPARTICLE OR ?PARTICUL? OR
                MICROPARTICUL? OR NANOPARTICUL? OR ?GRANUL? OR MICROGRAN
               UL? OR NANOGRANUL?
               QUE ABB=ON PLU=ON SILVER OR AG
L19
               QUE ABB=ON PLU=ON ?POLYMER? OR HOMOPOLYMER? OR POLYPRO
L20
               PYLEN? OR POLYSTYREN? OR POLYETHYLEN? OR PET
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
L21 (
               SEL PLU=ON L21 1- RN :
                                            16 TERMS
L22
            16) SEA FILE=REGISTRY ABB=ON PLU=ON L22
L23 (
             6 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND AG/ELS
L24
               QUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?S
L39
                PHER? OR MICROSPHER? OR NANOSPHER?
          7229 SEA FILE=EMBASE ABB=ON PLU=ON L20 (10A) (L18 OR L39)
L122
           446 SEA FILE=EMBASE ABB=ON PLU=ON L19 (10A) L20
L123
           1626 SEA FILE=EMBASE ABB=ON PLU=ON L19 (15A) (L18 OR L39)
L124
            26 SEA FILE=EMBASE ABB=ON PLU=ON L122 AND L123 AND L124
L125
                                              227 TERMS
               SEL PLU=ON L24 1- CHEM:
L126
        148563 SEA FILE=EMBASE ABB=ON PLU=ON L126
L127
         14378 SEA FILE=EMBASE ABB=ON PLU=ON L17
L128
           253 SEA FILE=EMBASE ABB=ON PLU=ON L127 AND L128
L129
           253 SEA FILE=EMBASE ABB=ON PLU=ON L129 AND POLYMER+PFT,OLD,NT/CT
L130
          5583 SEA FILE=EMBASE ABB=ON PLU=ON SILVER+PFT,OLD,NT/CT
L131
            65 SEA FILE=EMBASE ABB=ON PLU=ON L130 AND L131
L132
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18 SEA FILE=EMBASE ABB=ON PLU=ON L132 AND (L18 OR L39)

43 SEA FILE=EMBASE ABB=ON PLU=ON L125 OR L133

L133

L134

O SEA FILE=EMBASE ABB=ON PLU=ON L132 AND ?DEXTRAN? L135 1 SEA FILE=EMBASE ABB=ON PLU=ON L134 AND ?DEXTRAN? L136 O SEA FILE=EMBASE ABB=ON PLU=ON L134 AND ((A-DEXTRAN/BI L137 OR CDC-H/BI OR "DEX 500"/BI OR "DEXTRAN B 512"/BI OR "DEXTRAN B1355"/BI OR "DEXTRAN D 10"/BI OR "DEXTRAN PL 1S"/BI OR "DEXTRAN PT 25"/BI OR "DEXTRAN PVD"/BI OR "DEXTRAN RMI"/BI OR "DEXTRAN T 10"/BI OR "DEXTRAN T 110"/BI OR "DEXTRAN T 150"/BI OR "DEXTRAN T 20"/BI OR "DEXTRAN T 2000"/BI OR "DEXTRAN T 500"/BI OR "DEXTRAN T 70"/BI OR "DEXTRAN 1.5"/BI OR "DEXTRAN 10"/BI OR "DEXTRAN 1000"/BI OR "DEXTRAN 10000"/BI OR "DEXTRAN 110"/BI OR "DEXTRAN 15"/BI OR "DEXTRAN 150"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 20000"/BI OR "DEXTRAN 250"/BI OR "DEXTRAN 3000"/BI OR "DEXTRAN 40"/BI OR "DEXTRAN 40000"/BI OR "DEXTRAN 45"/BI OR "DEXTRAN 500"/BI OR "DEXTRAN 60"/BI OR "DEXTRAN 70"/BI OR "DEXTRAN 75"/BI OR DEXTRAN/BI OR DEXTRANEN/BI OR DEXTRANS/BI OR DEXTRAVEN/BI OR EUDEXTRAN/BI OR EXPANDEX/BI OR "G 75"/BI OR GENTRAN/BI OR HEMODEX/BI OR HYSCON/BI OR HYSKON/BI OR INFUCOLL/BI OR INTRADER/BI OR INTRADEX/BI OR LMD/BI OR LMWD/BI)) O SEA FILE=EMBASE ABB=ON PLU=ON L134 AND (("ACP 10"/BI OR L138 "AGENT AT 717"/BI OR "AGRIMER K 30"/BI OR "AGRIMER 15"/BI OR "AGRIMER 30"/BI OR "AGRIMER 90"/BI OR "ALBIGEN A"/BI OR "ALDACOL Q"/BI OR "ANTARON P 804"/BI OR "ANTITOX VANA"/BI OR "AT 717"/BI OR "B 7509"/BI OR BOLINAN/BI OR "CEVIAN A 88036"/BI OR "DISCOL K 30L"/BI OR "DISINTEX 200"/BI OR "DIVERGAN EF"/BI OR "DIVERGAN F"/BI OR "DIVERGAN RS"/BI OR "GAFTEX AE-K 15"/BI OR "GANEX P 804"/BI OR HEMODESIS/BI OR HEMODEZ/BI OR "K 115 (VINYL POLYMER) "/BI OR "K 115"/BI OR "K 12"/BI OR "K 120 (VINYL POLYMER) "/BI OR "K 120"/BI OR "K 15 (POLYMER) "/BI OR "K 15"/BI OR "K 17"/BI OR "K 25 (SURFACTANT)"/BI OR "K 25"/BI OR "K 29-32"/BI OR "K 30"/BI OR "K 30C"/BI OR "K 60 (POLYMER)"/BI OR "K 60"/BI OR "K 85 (VINYL POLYMER)"/BI OR "K 85"/BI OR "K 90"/BI OR "K 92 (VINYL POLYMER)"/BI OR "K 92"/BI OR "1-VINYL-2-PYRROLIDINONE POLYMER"/BI OR "1-VINYL-2-PYRROLIDONE HOMOPOLYMER "/BI OR "1-VINYL-2-PYRROLIDONE POLYMER"/BI OR 143RP/BI OR "2-PYRROLIDINONE, 1-ETHENYL-, HOMOPOLYMER"/BI OR "2-PYRROLIDINO NE, 1-VINYL-, POLYMERS"/BI OR "40K (VINYL POLYMER)"/BI OR 40K/BI)) O SEA FILE=EMBASE ABB=ON PLU=ON L134 AND ((COLLO-BO/BI OR "E L139 252"/BI OR NITER/BI OR NITRE/BI OR "NITRIC ACID POTASSIUM SALT (1:1) "/BI OR "NITRIC ACID POTASSIUM SALT"/BI OR "NITRIC ACID,

L140

POTASSIUM SALT"/BI OR "POTASSIUM NITRATE"/BI OR SALTPETER/BI))
43 SEA FILE=EMBASE ABB=ON PLU=ON (L134 OR L135 OR L136 OR L137
OR L138 OR L139) \_\_.

OR L138 OR L139)
L141 24 SEA FILE EMBASE ABB=ON PLU=ON L140 AND (AY<2004 OR PY<2004
OR PRY<2004 OR MY<2004 OR REVIEW/DT)

### => d his 1168

(FILE BIOSIS, PASCAL, JICST-EPLUS, CABA, LIFESCI, DRUGU, DRUGB, VETU, VETB, SCISEARCH, CONF, CONFSCI, DISSABS, ENTERED AT 11:18:20 ON 06 FEB 2006)

L168 16 S L167 AND (AY<2004 OR PY<2004 OR PRY<2004 OR MY<2004 OR REVIEW

# => d que stat l168

L18 QUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?P
ARTICLE OR MICROPARTICLE OR NANOPARTICLE OR ?PARTICUL? OR
MICROPARTICUL? OR NANOPARTICUL? OR ?GRANUL? OR MICROGRAN
UL? OR NANOGRANUL?

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L19
                OUE ABB=ON PLU=ON SILVER OR AG
                OUE ABB=ON PLU=ON ?POLYMER? OR HOMOPOLYMER? OR POLYPRO
L20
                PYLEN? OR POLYSTYREN? OR POLYETHYLEN? OR PET
L39
                OUE ABB=ON PLU=ON ?BEAD OR MICROBEAD OR NANOBEAD OR ?S
                PHER? OR MICROSPHER? OR NANOSPHER?
          48197 SEA (L20 (7A) (L18 OR L39))
1.151
           4386 SEA L19 (10A) L20
L152
L153
          11141 SEA L19(10A) (L18 OR L39)
            359 SEA L151 AND L152
L154
            311 SEA L154 AND L153
L155
              5 SEA L155 AND ?DEXTRAN?
L156
             17 SEA L155 AND ?PYRROLID?
L158
              O SEA L155 AND (KNO3 OR (POTASSIUM (1A) NITRATE) OR SALTPETER OR
L159
                 (SALT(1W) PETER))
            242 SEA L155 AND L19/TI, IT, CC, CT, ST, STP
L160
            244 SEA L155 AND L20/TI, IT, CC, CT, ST, STP
L161
            209 SEA L160 AND L161
L162
            173 SEA L162 AND (L18/TI,IT,CC,CT,ST,STP OR L39/TI,IT,CC,CT,ST,STP)
L163
              8 SEA L163 AND (?DELIVER? OR ?RELEAS?)
L164
             2 SEA L163 AND (?DRUG OR ?PHARM? OR ?THERAP?)
L165
              8 SEA L163 AND (?ADMIN? OR ?TREAT?)
L166
            38 SEA L156 OR L158 OR L159 OR (L164 OR L165 OR L166)
L167
            16 SEA L167 AND (AY<2004 OR PY<2004 OR PRY<2004 OR MY<2004 OR
L168
                REVIEW/DT)
=> d que stat 1149
              1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
L10 (
                SEL PLU=ON L10 1- RN : 16 TERMS
L11
            16 SEA FILE=REGISTRY ABB=ON PLU=ON L11
L12
              8 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND PMS/CI
L13
           298 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-39-8/RN, CRN
L14
          1033 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-54-0/RN, CRN
L15
           6 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT (L14 OR L15)
L17
L21 (
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-825930/APPS
                                              16 TERMS
                SEL PLU=ON L21 1- RN :
L22
L23 ( 16) SEA FILE=REGISTRY ABB=ON PLU=ON L17
L146
8635 SEA FILE=BIOSIS ABB=ON PLU=ON L17
CEA FILE=BIOSIS ABB=ON PLU=ON L24
DIJI=ON L14
           16) SEA FILE=REGISTRY ABB=ON PLU=ON L22
             6 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND AG/ELS
            17 SEA FILE=BIOSIS ABB=ON PLU=ON L146 AND L147
L148
L149
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                OR PRY<2004 OR MY<2004 OR REVIEW/DT)
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=> dup rem 166 182 186 1118 1141 1168 1149

DUPLICATE IS NOT AVAILABLE IN 'CONF'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

FILE 'HCAPLUS' ENTERED AT 11:45:40 ON 06 FEB 2006

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=> file stnguide

FILE 'STNGUIDE' ENTERED AT 11:45:50 ON 06 FEB 2006
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 3, 2006 (20060203/UP).

=> d ibib ed ab hitind hitstr YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' - CONTINUE? (Y)/N:y

L171 ANSWER 1 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2004:927003 HCAPLUS

DOCUMENT NUMBER: 141:384310

TITLE: Delivery vehicle for silver ions

INVENTOR(S): Neuwirth, Robert S.

PATENT ASSIGNEE(S): Ablation Products LLC, USA SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.			KIND DATE			APPLICATION NO.					DATE						
	WO 2004093793 WO 2004093793							WO 2004-US11805					20040416 <					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	AZ,	
		BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	ΡL,	PT,	RO,	SE,	SI,	
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	
		TD,	TG															
CA	2522	191			AA		2004	1104	(	CA 2	004-2	2522	191		20	00404	116 <	
US	2004	2653	90		A1		2004	1230	1	JS 20	004-	3259	30		20	00404	116 <	
EP	1617	850			A2		2006	0125	]	EP 2	004-1	7599:	28		20	00404	116 <	
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	ВG,	CZ,	EE,	HU,	PL,	SK, HR	
PRIORITY	PRIORITY APPLN. INFO.:								US 2003-463255P					P 20030416 <				
									1	WO 2	004-1	JS11	305	7	W 20	00404	116	

ED Entered STN: 04 Nov 2004

A delivery vehicle for a silver ion source such as silver AB nitrate, suitable for use in the treatment of menorrhagia, comprises a plurality of physiol. inert beads bearing a tissue cauterizing amount of a silver ion source. Preferably the beads are made of a physiol. inert polymer, ceramic or stainless steel. The silver ion source preferably is silver nitrate and can be substantially pure silver nitrate, or can comprise silver nitrate in combination with a binder or a diluent. Suitable binders include physiol. tolerable synthetic polymeric binders, polysaccharide binders, and the like. Diluents can include other salt materials such as potassium nitrate. The beads are useful in treating menorrhagia of a mammalian uterus. The beads can be delivered to the uterus via a catheter, and are distributed throughout the uterine cavity by uterine massage or like expedient. Silver ions are delivered to the endometrium and cause necrosis of the endometrial tissue. The silver ions remaining within the uterine cavity can then be neutralized with a sodium chloride solution delivered to the uterus e.g., by catheter, and the beads recovered from the uterus.

IC ICM A61K

```
CC
     63-6 (Pharmaceuticals)
     delivery vehicle silver menorrhagia treatment
st
     Polyamides, biological studies
IT
     Polyurethanes, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (beads; delivery vehicle for silver ions)
IT
     Ceramics
     Human
     Uterus
        (delivery vehicle for silver ions)
     Gelatins, biological studies
IT
     Polyesters, biological studies
       Polymers, biological studies
     Polysaccharides, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (delivery vehicle for silver ions)
IT
     Menstrual disorder
        (menorrhagia; delivery vehicle for silver ions)
     9002-88-4, Polyethylene 9003-07-0, Polypropylene
IT
     9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-
     butadiene-styrene copolymer 24937-78-8, EVA 25038-59-9
     , PET, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (beads; delivery vehicle for silver ions)
     563-63-3, Silver acetate 7440-22-4D, Silver, compds.
     7757-79-1, Potassium nitrate, biological studies 7761-88-8
     , Silver nitrate, biological studies 7783-93-9, Silver
     perchlorate 7783-98-4, Silver permanganate 9003-39-8,
     Polyvinylpyrrolidone 9004-54-0, Dextran, biological studies
     12597-68-1, Stainless steel, biological studies 19025-99-1,
     Silver lactate monohydrate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (delivery vehicle for silver ions)
     9002-88-4, Polyethylene 9003-07-0, Polypropylene
TT
     9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-
     butadiene-styrene copolymer 24937-78-8, EVA 25038-59-9
     , PET, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (beads; delivery vehicle for silver ions)
     9002-88-4 HCAPLUS
RN
CN
     Ethene, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN
         74-85-1
     CMF C2 H4
H_2C = CH_2
RN
     9003-07-0 HCAPLUS
CN
     1-Propene, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 115-07-1
     CMF C3 H6
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H_3C-CH=CH_2
RN
     9003-53-6 HCAPLUS
CN
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 100-42-5
     CMF C8 H8
H_2C = CH - Ph
     9003-56-9 HCAPLUS
RN
     2-Propenenitrile, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA
CN
     INDEX NAME)
     CM
          1
     CRN 107-13-1
     CMF C3 H3 N
H_2C = CH - C = N
     CM
          2
     CRN 106-99-0
     CMF C4 H6
H2C== CH- CH== CH2
     CM
          3
     CRN 100-42-5
     CMF C8 H8
H_2C = CH - Ph
     24937-78-8 HCAPLUS
RN
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 108-05-4
     CMF C4 H6 O2
AcO-CH=CH_2
```

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

RN 25038-59-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

CN Acetic acid, silver(1+) salt (8CI, 9CI) (CA INDEX NAME)

● Aq(I)

RN 7440-22-4 HCAPLUS CN Silver (8CI, 9CI) (CA INDEX NAME)

Αg

RN 7757-79-1 HCAPLUS

CN Nitric acid potassium salt (8CI, 9CI) (CA INDEX NAME)

● K

RN 7761-88-8 HCAPLUS CN Nitric acid silver(1+) salt (8CI, 9CI) (CA INDEX NAME)

■ Ag(I)

RN 7783-93-9 HCAPLUS CN Perchloric acid, silver(1+) salt (8CI, 9CI) (CA INDEX NAME)

● Ag(I)

RN 7783-98-4 HCAPLUS CN Permanganic acid (HMnO4), silver(1+) salt (8CI, 9CI) (CA INDEX NAME)

● Ag(I)

RN 9003-39-8 HCAPLUS
CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CM 1

CRN 88-12-0 CMF C6 H9 N O

RN 9004-54-0 HCAPLUS

CN Dextran (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 19025-99-1 HCAPLUS

CN Silver, [2-(hydroxy-κ0)propanoato-κ0]-, monohydrate (9CI) (CA INDEX NAME)

● H20

=> d ibib ed ab hitind hitstr 2-13
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' - CONTINUE? (Y)/N:y

L171 ANSWER 2 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:451247 HCAPLUS

DOCUMENT NUMBER: 142:487653

TITLE: Medical implants and fibrosis-inducing agents INVENTOR(S): Hunter, William L.; Gravett, David M.; Toleikis,

Philip M.; Maiti, Arpita; Signore, Pierre E.; Liggins,

Richard T.

PATENT ASSIGNEE(S): Angiotech International A.-G., Switz.

SOURCE: PCT Int. Appl., 2095 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

	PAT	ENT	NO.			KIN	D	DATE		i	APPL	ICAT:	ION I	. OV		DA	ATE		
							_		<b>-</b>										
WO 2005046746					A2 20050526			WO 2004-US37335						20041110 <					
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             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
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PRIORITY APPLN. INFO.:
                                            US 2003-523908P
                                                                P 20031120 <--
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                                            US 2003-526541P
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                                                                  20040624
                                            US 2004-986231
                                                                A1 20041110
                                                                 A1 20041110
                                            US 2004-986450
```

ED Entered STN: 27 May 2005

AB A method comprises introducing into an intervertebral disk space of a patient, a therapeutically effective amount of a fibrosing agent. Thus, a medical implant was coated with poly(L-lysine) solution in water. The polylysine was deposited on both ends of the implant.

IC ICM A61L027-00

TΤ

ICS A61L027-54; A61L031-00; A61L031-16

CC 63-7 (Pharmaceuticals)

IT Drug delivery systems

(microspheres; medical implants and fibrosis-inducing agents) 50-02-2, Dexamethasone 50-28-2, Estra-1,3,5(10)-triene-3,17-diol  $(17\beta)$ -, biological studies 50-99-7, Dextrose, biological studies 51-21-8, 5-Fluorouracil 56-53-1, Diethylstilbestrol 56-81-5, Glycerin, biological studies 57-50-1, Sucrose, biological studies 59-05-2, Methotrexate 60-54-8, Tetracycline 64-17-5, Ethanol, biological 67-68-5, DMSO, biological studies 79-10-7D, Acrylic acid, studies esters, polymers 79-41-4D, Methacrylic acid, esters, polymers 100-42-5D, Styrene, polymers 106-99-0D, Butadiene, polymers 127-07-1, Hydroxyurea 139-88-8, Sotradecol 302-79-4, all-trans-Retinoic acid 471-34-1, Calcium carbonate, biological studies 518-28-5, Podophyllotoxin 564-25-0, Doxycycline 1191-50-0 1306-06-5, 1332-37-2, Iron oxide, biological studies 4759-48-2, Hydroxylapatite Isotretinoin 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-06-4D, Platinum, complexes 7440-25-7, Tantalum, biological studies 7440-26-8, Technetium, biological studies 7440-32-6, Titanium, biological studies 7440-39-3, Barium, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-54-2, Gadolinium, biological studies 7631-86-9, Silica, biological

7647-14-5, Sodium chloride, biological studies 7689-03-4, 7758-87-4, Tricalcium phosphate 7761-88-8, Silver Camptothecin nitrate, biological studies 7778-18-9, Calcium sulfate 8031-09-2. 9002-72-6, Growth hormone 9002-84-0, PTFE Sodium morrhuate 9002-92-0, Polidocanol 9002-88-4, Polyethylene 9003-05-8, Polyacrylamide 9003-07-0, Polypropylene 9003-39-8, Polyvinylpyrrolidone 9003-53-6, Polystyrene 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, esters 9004-61-9, Hyaluronic acid 9005-25-8, Starch, biological studies 9005-32-7, 9005-49-6, Heparin, biological studies Alginic acid 9012-76-4, 9061-61-4, NGF 10118-90-8, Minocycline 11056-06-7, Chitosan 11128-99-7, Angiotensin II 12167-74-7, Calcium hydroxide Bleomycin 14807-96-6, Talc, biological studies phosphate (Ca5(OH)(PO4)3) 15663-27-1, Cisplatin 15802-18-3D, Cyanoacrylic acid, esters, polymers 17031-92-4, Calcium pyrophosphate dihydrate 23214-92-8, Doxorubicin 24937-78-8, Ethylene-vinyl acetate copolymer 25034-86-0, Methylmethacrylate-styrene copolymer 25104-18-1, Poly(L-lysine) 25614-03-3, Bromocriptine 26780-50-7, 25322-68-3, Polyethylene glycol 27964-99-4, Poly(D-lysine Glycolide-lactide copolymer 26966-14-3 32222-06-3,  $1\alpha$ , 25-Dihydroxyvitamin D3 33419-42-0, hydrobromide) 34346-01-5, Glycolic acid-lactic acid copolymer Etoposide 38000-06-5, Poly(L-lysine), SRU 50903-99-6, L-NAME 59216-10-3, Monosodium urate monohydrate 59865-13-3, Cyclosporin A 61912-98-9, Insulin-like growth factor 62031-54-3, FGF 65271-80-9, Mitoxantrone 83869-56-1, GM-CSF 106096-93-9, Basic fibroblast growth factor 125265-78-3, N-Carboxybutyl 189460-40-0, Connective tissue growth 127464-60-2, VEGF chitosan 511550-73-5 factor 302781-03-9 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medical implants and fibrosis-inducing agents) 7761-88-8, Silver nitrate, biological studies 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-39-8, Polyvinylpyrrolidone 9003-53-6, Polystyrene 24937-78-8 , Ethylene-vinyl acetate copolymer RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medical implants and fibrosis-inducing agents) 7761-88-8 HCAPLUS Nitric acid silver(1+) salt (8CI, 9CI) (CA INDEX NAME)

ΙT

RN

CN

# ● Ag(I)

RN 9002-88-4 HCAPLUS
CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

CMF C2 H4

 $H_2C = CH_2$ 

```
9003-07-0 HCAPLUS
RN
CN
     1-Propene, homopolymer (9CI) (CA INDEX NAME)
     CM
          1
     CRN 115-07-1
     CMF C3 H6
H_3C-CH=CH_2
     9003-39-8 HCAPLUS
RN
     2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 88-12-0
     CMF C6 H9 N O
  CH = CH_2
     9003-53-6 HCAPLUS
RN
CN
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
          1
     CRN 100-42-5
     CMF C8 H8
H_2C \longrightarrow CH - Ph
     24937-78-8 HCAPLUS
RN
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 108-05-4
     CMF C4 H6 O2
Aco-CH=CH_2
     CM
          2
     CRN 74-85-1
     CMF C2 H4
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### $H_2C \longrightarrow CH_2$

L171 ANSWER 3 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN 2005:141200 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 142:254568 Methods and compositions for increasing the efficacy TITLE: of biologically-active ingredients such as antitumor Windsor, J. Brian; Roux, Stan J.; Lloyd, Alan M.; INVENTOR (S): Thomas, Collin E. PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA PCT Int. Appl., 243 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE PATENT NO. KIND DATE ---------\_\_\_\_\_\_ \_\_\_\_\_ WO 2003-US32667 20031016 <--WO 2005014777 A2 20050217 WO 2005014777 A3 20050915 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20050217 CA 2003-2502148 20031016 <--AACA 2502148 20050921 EP 2003-816736 20031016 <--EP 1576150 A2 20051102 EP 1576150 A3 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK <u>US 2002-418803P</u> P 20021016 <--WO 2003-US32667 W 20031016 <--PRIORITY APPLN. INFO .: / Entered STN: 18 Feb 2005 ED The invention provides methods and compns. for modulating the sensitivity ΔR of cells to cytotoxic compds. and other active agents. In accordance with the invention, compns. are provided comprising combinations of ectophosphatase inhibitors and active agents. Active agents include antibiotics, fungicides, herbicides, insecticides, chemotherapeutic agents, and plant growth regulators. By increasing the efficacy of active agents, the invention allows use of compns. with lowered concns. of active ingredients. IC ICM C12N 1-6 (Pharmacology) CC IT 142-87-0 143-18-0 143-28-2 143-33-9, Sodium cyanide (Na(CN)) 144-21-8 144-41-2 144-55-8, Carbonic acid monosodium salt, biological studies 144-62-7, Ethanedioic acid, biological studies

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    21540-35-2
    hydroxide (Al(OH)3), biological studies
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                             21908-53-2, Mercury oxide (HgO)
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        (methods and compns. for increasing efficacy of biol.-active
       ingredients such as antitumor agents)
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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (methods and compns. for increasing efficacy of biol.-active
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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (methods and compns. for increasing efficacy of biol.-active
   ingredients such as antitumor agents)
9002-88-4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (oxidized; methods and compns. for increasing efficacy of biol.-active
   ingredients such as antitumor agents)
563-63-3 7440-22-4, Silver, biological studies
7757-79-1, Nitric acid potassium salt, biological studies
7761-88-8, Nitric acid silver(1+) salt, biological studies
25655-41-8 53403-98-8 82010-83-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (methods and compns. for increasing efficacy of biol.-active
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IT

IT

ingredients such as antitumor agents)

RN 563-63-3 HCAPLUS

CN Acetic acid, silver(1+) salt (8CI, 9CI) (CA INDEX NAME)

● Ag(I)

RN 7440-22-4 HCAPLUS CN Silver (8CI, 9CI) (CA INDEX NAME)

Ag

RN 7757-79-1 HCAPLUS

CN Nitric acid potassium salt (8CI, 9CI) (CA INDEX NAME)

K

RN 7761-88-8 HCAPLUS CN Nitric acid silver(1+) salt (8CI, 9CI) (CA INDEX NAME)

● Ag(I)

RN 25655-41-8 HCAPLUS CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine (9CI) (CA INDEX NAME)

CM 1

CRN 7553-56-2

CMF I2

I-I

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CM 2

CRN 9003-39-8

CMF (C6 H9 N O) x

CCI PMS

CM 3

CRN 88-12-0

CMF C6 H9 N O
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RN 53403-98-8 HCAPLUS
CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with [1,1'-biphenyl]-2-ol (9CI) (CA INDEX NAME)

CM 1

CRN 90-43-7

CM 2

CRN 9003-39-8

CMF (C6 H9 N O) x

CCI PMS

CM 3

CRN 88-12-0

CMF C6 H9 N O

CMF C12 H10 O

RN 82010-83-1 HCAPLUS
CN Formaldehyde, compd. with 1-ethenyl-2-pyrrolidinone homopolymer (9CI) (CA INDEX NAME)

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CM 1
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CRN 50-00-0 CMF C H2 O

# н2С=0

CM 2

CRN 9003-39-8 CMF (C6 H9 N O)x

CCI PMS

CM 3

CRN 88-12-0 CMF C6 H9 N O

# CH=CH<sub>2</sub>

## IT 9002-88-4

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oxidized; methods and compns. for increasing efficacy of biol.-active

(oxidized; methods and compns. for increasing efficacy of biol.-active ingredients such as antitumor agents)

RN 9002-88-4 HCAPLUS

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1 CMF C2 H4

# $H_2C = CH_2$

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ACCESSION NUMBER: 2005:119884 HCAPLUS

DOCUMENT NUMBER: 142:204864

TITLE: Medical implants coated with porous carbon surfaces

carrying drugs

INVENTOR(S): Rathenow, Joerg; Asgari, Soheil; Ban, Andreas

PATENT ASSIGNEE(S): Blue Membranes GmbH, Germany

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CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT: 9

### PATENT INFORMATION:

	PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT:	ION 1	. O <i>l</i>		D	ATE		
	DE	1033	- <b>-</b> 3099			A1	-	2005	0210		DE 2	003-:	 1033:	3099		20	0030	 721 <	; <b></b>
	DE	2020	0400	9061		U1		2004	0916		DE 2	004-3	2020	0400	9061	20	040	528 <	: <b>-</b> -
	CA	2519	750			AA		2004	1209	1	CA 2	004-	2519	750		20	040	528 <	: <b>-</b> -
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			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
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The invention concerns a method for the preparation of medical implants with functionalized surfaces involving the steps: (a)preparation of medical implant that is at least partially coated with a carbon-containing layer; (b) activation of the carbon-containing layer by forming a pores on the surface; (c) functionalization of the activated, carbon-containing surface. The carbon-containing layer is composed of pyrolytically prepared carbon, carbon deposited by CVD or PVD process, sputtered carbon, metal carbides, metal carbonitrides, metal oxynitrides, metal oxycarbides or their combinations. The carbon-containing layers are activated by oxidation with air, oxygen, dinitrogen oxide, and oxidizing acids, also at elevated temperature A

process can also be used for activation. Activated surfaces are functionalized by loading one or more drugs, microorganisms or cells onto the surface. Activated surfaces can be sealed in a CVD or CVI (chemical vapor infiltration) process. The implants are prepared from carbon, carbon fibers, ceramics, glass, metals, alloys, artificial bone, stone, minerals. Artificial blood vessels, stents, coronary stents, peripheral stents, orthopedic implants, bone and joint prosthesis, artificial heart, heart valves, s.c., and i.m. implants can be activated and functionalized.

- IC ICM A61L027-00
  - ICS A61L029-00; A61L033-00; A61F002-30; A61F002-28; A61F002-44; A61F002-24
- CC 63-7 (Pharmaceuticals)
- IT Drug delivery systems

(nanospheres; medical implants coated with porous carbon surfaces carrying drugs)

IT 50-02-2, Dexamethasone 50-07-7, Mitomycin 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-56-6, Oxytocin, biological studies 50-78-2, Acetylsalicylic acid 51-41-2, Norepinephrine 51-43-4, Epinephrine 51-45-6, Histamine, biological studies 51-61-6, Dopamine, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 53-06-5, Cortisone 53-86-1, Indomethacin 54-05-7, Chloroquine 56-23-5, Carbon tetrachloride, biological studies 56-54-2, Quinidine 56-75-7, Chloramphenicol 57-22-7, Vincristin 57-41-0, Phenytoine 58-14-0,

58-61-7, Adenosine, biological studies 59-05-2, Pyrimethamin Methotrexate 59-30-3, Folic acid, biological studies 60-54-8, 61-33-6, Penicillin G, biological studies Tetracycline 61-68-7, 62-55-5, Thioacetamide 63-74-1, Sulfonamide Mefenamic acid 64-17-5, Ethanol, biological studies 68-35-9, Sulfadiazine 69-53-4, Ampicillin 71-63-6, Digitoxin 80-08-0, Dapson 83-43-2, Methylprednisolone 87-08-1, Penicillin V 114-07-8, Erythromycin 118-42-3, Hydroxychloroguine 119-04-0, Framycetin 124-94-7, Triamcinolone 127-07-1, Hydroxycarbamide 127-31-1, Fludrocortisone 137-58-6, 140-64-7, Pentamidine diisethionate 152-47-6, Sulfalene Lidocaine 154-21-2, Lincomycin 302-79-4, Tretinoin 356-12-7, Fluocinonide 361-37-5 365-26-4, Oxilofrine 370-14-9, Pholedrine 378-44-9, 382-67-2, Desoximetasone 443-48-1, Metronidazol Betamethasone 466-06-8, Proscillaridin 484-23-1, Dihydralazin 500-92-5, Proguanil 511-12-6, Dihydroergotamine 525-66-6, Propranolol 536-21-0, Norfenefrine 552-94-3, Salsalate 555-30-6, Methyldopa 564-25-0, 586-06-1, Orciprenaline 630-60-4, Ouabain Doxycycline Desonide 644-62-2 660-27-5, Diisopropyl amine dichloroacetate 709-55-7, Etilefrine 738-70-5, Trimethoprim 768-94-5, Amantadine 807-38-5, Fluocinolone 865-21-4, Vinblastin 1066-17-7, Colistin 1306-05-4, Fluorapatite 1306-06-5, Hydroxylapatite 1393-87-9, Fusafungine 1404-26-8, Polymyxin B 1404-90-6, Vancomycin 1524-88-5, Flurandrenolide 1695-77-8, Spectinomycin 1951-25-3, Amiodarone 2589-47-1, Prajmaliumbitartrate, biological studies 2809-21-4, Etidronic 3056-17-5, Stavudine 3093-35-4, Halcinonide 3385-03-3, Flunisolide 3737-09-5, Disopyramide 3930-20-9, Sotalol 4360-12-7, 4419-39-0, Beclomethasone 4828-27-7, Clocortolone 4936-47-4, Ajmalin Nifuratel 5104-49-4, Flurbiprofen 5355-48-6 6452-71-7, Oxprenolol 6990-06-3, Fusidinic acid 7440-22-4, Silver, biological studies 7440-25-7, Tantalum, biological studies 7440-32-6, Titanium, biological 7440-66-6, Zinc, biological studies 7481-89-2, Zalcitabine 7542-37-2, Paromomycin 7681-49-4, Sodium fluoride, biological studies 7758-87-4, Tricalciumphosphate 8001-27-2, Hirudin 8025-81-8, Spiramycin 8067-24-1, Co-Dergocrine mesylate 9000-07-1, Carrageenan 9002-01-1, Streptokinase 9002-60-2, Corticotropin, biological studies 9002-71-5, Thyrotrophin 9002-88-4, Polyethylene 9002-89-5, Polyvinylalcohol 9003-01-4, Acrylic acid homopolymer 9003-07-0 , Polypropylene 9003-39-8, Polyvinylpyrrolidone 9004-32-4, Carboxymethylcellulose 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic 9004-64-2, Hydroxypropylcellulose 9004-65-3, Hydroxypropylmethylcellulose 9004-67-5, Methylcellulose 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9005-49-6, Heparin, biological studies 9012-76-4, Chitosan 9039-53-6, Urokinase 9061-61-4, Nerve growth factor 10118-90-8, Minocycline 10163-15-2, Disodium fluorophosphate 10596-23-3, Clodronic acid 11096-26-7, Erythropoietin 11111-12-9, Cephalosporin 11128-99-7, Angiotensin II 12597-68-1, Stainless steel, biological studies 12629-01-5, Somatropin 13010-20-3, Nitrosourea 13292-46-1, Rifampicin 12683-48-6 13463-67-7, Titanium dioxide, biological studies 14402-89-2, Nitroprusside sodium 14636-12-5, Terlipressin 15307-86-5, Diclofenac 15686-71-2, Cefalexin 15687-27-1, Ibuprofen 15663-27-1, Cisplatin 16662-47-8, Gallopamil 16679-58-6, Desmopressin 16846-24-5, Josamycin 19216-56-9, Prazosin 19387-91-8, Tinidazol 18323-44-9, Clindamycin 19388-87-5, Taurolidine 20830-75-5, Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22071-15-4, Ketoprofen 22204-53-1, Naproxen 22254-24-6, Ipratropium bromide 22494-42-4, Diflunisal 23155-02-4, Fosfomycin 24937-78-8 25038-59-9, biological studies 25087-26-7, Methacrylic acid homopolymer 25104-18-1, Polylysine 25122-41-2, Clobetasol 25190-06-1, Poly(Tetramethylene glycol)

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        (medical implants coated with porous carbon surfaces carrying drugs)
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     Polyvinylpyrrolidone 9004-54-0, Dextran, biological studies
     24937-78-8 25038-59-9, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (medical implants coated with porous carbon surfaces carrying drugs)
     7440-22-4 HCAPLUS
     Silver (8CI, 9CI) (CA INDEX NAME)
     9002-88-4 HCAPLUS
     Ethene, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 74-85-1
     CMF C2 H4
H_2C \longrightarrow CH_2
     9003-07-0 HCAPLUS
     1-Propene, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 115-07-1
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IT

RN

CN

Αg

RN

CN

CN

CMF C3 H6

 $_{\rm H_3C-CH} = _{\rm CH_2}$ 

RN 9003-39-8 HCAPLUS

2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME) CN

CM 1

CRN 88-12-0 CMF C6 H9 N O

 $CH = CH_2$ 

9004-54-0 HCAPLUS RN

Dextran (9CI) (CA INDEX NAME) CN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

24937-78-8 HCAPLUS RN

Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME) CN

CM

CRN 108-05-4

CMF C4 H6 O2

 $AcO-CH=CH_2$ 

2 CM

CRN 74-85-1

CMF C2 H4

 $H_2C = CH_2$ 

25038-59-9 HCAPLUS RN

Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX CN

NAME)

L171 ANSWER-5 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:119883 HCAPLUS

DOCUMENT NUMBER:

142:204863

TITLE:

Biocompatible coated medical implants with a carbon

layer and method for preparation

INVENTOR(S): PATENT ASSIGNEE(S): Rathenow, Joerg; Asgari, Soheil; Ban, Andreas

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SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

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German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
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DE 202004009060	U1 200409	916 DE 2004-202004009	0060 20040510 <
CA 2519742	AA 20041:	125 CA 2004-2519742	20040510 <
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WO 2004101017	A3 200503		
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SN, TD, T	rg .		

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                                             WO 2004-EP4985
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                                             WO 2004-EP5785
                                                                 W 20040528
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ED Entered STN: 11 Feb 2005

The invention concerns a method for the preparation of biocompatible coatings AB for implants, and medical goods composing the steps (a) coating the medical good at least partially with a polymer film using a coating process; (b) heating the polymer film in an oxygen-free atmospheric at 200-2500 °C to obtain a carbon layer on the medical good. The medical goods are heat resistant; they are prepared from carbon, carbon fibers, ceramics, glass, metals, alloys, artificial bone, stone, minerals; during heating they are transferred to their thermostable state. Artificial blood vessels, stents, coronary stents, peripheral stents, orthopedic implants, bone and joint prosthesis, artificial heart, heart valves, s.c., and i.m. implants can be coated. Other coating methods, e.g. dipping, spraying, printing can be applied. Several carbon layers with various porosity can be formed; biocompatible, biodegradable, non-biodegradable polymer layers can be placed on top of the carbon layers; drugs can be adsorbed onto the layers.

IC ICM A61L027-00 ICS A61L029-00; A61L033-00; A61F002-30; A61F002-28; A61F002-24; A61F002-44; A61F002-06

CC 63-7 (Pharmaceuticals)

IT Drug delivery systems

IT

(nanospheres; biocompatible coated medical implants with a carbon layer and method for preparation)

50-02-2, Dexamethasone 50-07-7, Mitomycin 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-56-6, Oxytocin, biological studies 51-41-2, Norepinephrine 51-43-4, Epinephrine Acetylsalicylic acid 51-45-6, Histamine, biological studies 51-61-6, Dopamine, biological 52-53-9, Verapamil 53-03-2, Prednisone 53-06-5, Cortisone studies 53-86-1, Indomethacin 54-05-7, Chloroquine 56-23-5, Carbon tetrachloride, biological studies 56-54-2, Quinidine 56-75-7, Chloramphenicol 57-22-7, Vincristin 57-41-0, Phenytoine 58-14-0, Pyrimethamin 58-61-7, Adenosine, biological studies 59-05-2, 59-30-3, Folic acid, biological studies 60-54-8, Methotrexate 61-33-6, Penicillin G, biological studies 61-68-7, Tetracycline Mefenamic acid 62-55-5, Thioacetamide 63-74-1, Sulfonamide 64-17-5, Ethanol, biological studies 68-35-9, Sulfadiazine 69-53-4, Amp 71-63-6, Digitoxin 80-08-0, Dapson 83-43-2, Methylprednisolone 69-53-4, Ampicillin 87-08-1, Penicillin V 114-07-8, Erythromycin 118-42-3, Hydroxychloroquine 119-04-0, Framycetin 124-94-7, Triamcinolone 127-07-1, Hydroxycarbamide 127-31-1, Fludrocortisone 137-58-6, 140-64-7, Pentamidine diisethionate 152-47-6, Sulfalene Lidocaine 154-21-2, Lincomycin 302-79-4, Tretinoin 356-12-7, Fluocinonide 365-26-4, Oxilofrine 370-14-9, Pholedrine 378-44-9, 361-37-5 382-67-2, Desoximetasone 443-48-1, Metronidazol Betamethasone 466-06-8, Proscillaridin 484-23-1, Dihydralazin 500-92-5, Proguanil 511-12-6, Dihydroergotamine 525-66-6, Propranolol 536-21-0, 552-94-3, Salsalate 555-30-6, Methyldopa Norfenefrine 586-06-1, Orciprenaline 630-60-4, Ouabain Doxycycline Desonide 644-62-2 660-27-5, Diisopropyl amine dichloroacetate 709-55-7, Etilefrine 738-70-5, Trimethoprim 768-94-5, Amantadine 807-38-5, Fluocinolone 865-21-4, Vinblastin 1066-17-7, Colistin 1306-05-4, Fluorapatite 1306-06-5, Hydroxylapatite 1393-87-9,

1404-26-8, Polymyxin B 1404-90-6, Vancomycin Fusafungine 1695-77-8, Spectinomycin 1951-25-3, Amiodarone Flurandrenolide 2589-47-1, Prajmaliumbitartrate, biological studies. 2809-21-4, Etidronic 3056-17-5, Stavudine 3093-35-4, Halcinonide 3385-03-3, 3737-09-5, Disopyramide 3930-20-9, Sotalol 4360-12-7. Flunisolide Ajmalin 4419-39-0, Beclomethasone 4828-27-7, Clocortolone 4936-47-4, Nifuratel 5104-49-4, Flurbiprofen 5355-48-6 6452-71-7, Oxprenolol 6990-06-3, Fusidinic acid 7440-22-4, Silver, biological studies 7440-25-7, Tantalum, biological studies 7440-32-6, Titanium, biological 7440-66-6, Zinc, biological studies 7481-89-2, Zalcitabine 7681-49-4, Sodium fluoride, biological studies 7542-37-2, Paromomycin 7758-87-4, Tricalciumphosphate 8001-27-2, Hirudin 8025-81-8, Spiramycin 8067-24-1, Co-Dergocrine mesylate 9000-07-1, Carrageenan 9002-01-1, Streptokinase 9002-60-2, Corticotropin, biological studies 9002-71-5, Thyrotrophin 9002-86-2, Polyvinylchloride 9002-88-4 , Polyethylene 9002-89-5, Polyvinylalcohol 9003-01-4, Acrylic acid homopolymer 9003-07-0, Polypropylene 9003-08-1, Melamine resin 9003-17-2, Polybutadiene 9003-27-4, Polyisobutene 9003-28-5, Polybutene 9003-39-8, Polyvinylpyrrolidone 9004-32-4, Carboxymethylcellulose 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic 9004-64-2, Hydroxypropylcellulose 9004-65-3, Hydroxypropylmethylcellulose 9004-67-5, Methylcellulose Starch, biological studies 9005-32-7, Alginic acid 9005-49-6, Heparin, 9012-76-4, Chitosan 9039-53-6, Urokinase biological studies 9061-61-4, Nerve growth factor 9078-70-0, Polypentene 10118-90-8, Minocycline 10163-15-2, Disodium fluorophosphate 10596-23-3, Clodronic 11096-26-7, Erythropoietin 11111-12-9, Cephalosporin 11128-99-7, Angiotensin II 12597-68-1, Stainless steel, biological 12629-01-5, Somatropin 12683-48-6 13010-20-3, Nitrosourea studies 13292-46-1, Rifampicin 13463-67-7, Titanium dioxide, biological studies 14402-89-2, Nitroprusside sodium 14636-12-5, Terlipressin 15307-86-5, Diclofenac 15663-27-1, Cisplatin 15686-71-2, Cefalexin 1 Ibuprofen 16662-47-8, Gallopamil 16679-58-6, Desmopressin 15687-27-1, 16662-47-8, Gallopamil 16846-24-5, Josamycin 18323-44-9, Clindamycin 19216-56-9, Prazosin 19387-91-8, Tinidazol 19388-87-5, Taurolidine 20830-75-5, Digoxin 21256-18-8, Oxaprozin 20854-94, Nifedipine 2071-15-4, Ketoprofen 22204-53-1, Naproxen 22254-24-6, Ipratropium bromide 22494-42-4, Diflunisal 23155-02-4, Fosfomycin 24937-78-8 25038-59-9, biological studies 25087-26-7, Methacrylic acid homopolymer 25104-18-1, Polylysine 25122-41-2, Clobetasol 25190-06-1, Poly(Tetramethylene glycol) 25322-68-3, Polyethylene oxide 25322-69-4, Polypropylene oxide 25614-03-3, Bromocriptine 25953-19-9, 26009-03-0, Polyglycolic acid Cefazolin 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26063-00-3, β-Hydroxybutyric acid homopolymer 26099-09-2 26100-51-6, 26171-23-3, Tolmetin Polylactic acid 26124-68-5, Polyglycolic acid 26744-04-7, β-Hydroxybutyric acid homopolymer, sru 26787-78-0, Amoxicillin 26807-65-8, Indapamide 26844-12-2, Indoramin 29122-68-7. 29679-58-1, Fenoprofen 30209-88-2 30516-87-1, Zidovudine Atenolol 30578-37-1, Amezinium metil sulfate 30685-43-9, Metildigoxin 31621-87-1, Polydioxanone 31828-71-4, Mexiletine 33069-62-4, 33515-09-2, Gonadorelin 33774-52-6, Detajmiumbitartrate, Paclitaxel biological studies 34346-01-5, Lactic acid-glycolic acid copolymer 34661-75-1, Urapidil 35607-66-0, Cefoxitin 36322-90-4, Piroxicam 36791-04-5, Ribavirin 38194-50-2, Sulindac 38304-91-5, 36703-88-5 Minoxidil 39562-70-4, Nitrendipine 40391-99-9 41340-25-4, Etodolac 41575-94-4, Carboplatin 41708-72-9, Tocainide 42399-41-7, Diltiazem 42794-76-3, Midodrine 42924-53-8, Nabumetone 50370-12-2, Cefadroxil 50972-17-3, Bacampicillin 51022-69-6, Amcinonide 51110-01-1,

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Somatostatin 51264-14-3, Amsacrine
                                            51333-22-3, Budesonide
     51384-51-1, Metoprolol 51481-65-3, Mezlocillin 51940-44-4, Pipemidic
            52013-44-2, Nitinol 53123-88-9, Sirolimus 53230-10-7,
     Mefloquine 53237-50-6 53714-56-0, Leuprorelin 53910-25-1,
     Pentostatin 53994-73-3, Cefaclor
                                        54063-53-5, Propafenone
     Flecainide
                 54143-56-5, Flecainide acetate 55142-85-3, Ticlopidine
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (biocompatible coated medical implants with a carbon layer and method
        for preparation)
     7440-22-4, Silver, biological studies 9002-88-4,
IT
     Polyethylene 9003-07-0, Polypropylene 9003-39-8,
     Polyvinylpyrrolidone 9004-54-0, Dextran, biological studies
     24937-78-8 25038-59-9, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (biocompatible coated medical implants with a carbon layer and method
        for preparation)
     7440-22-4 HCAPLUS
RN
CN
     Silver (8CI, 9CI) (CA INDEX NAME)
Ag
     9002-88-4 HCAPLUS
RN
CN
     Ethene, homopolymer (9CI) (CA INDEX NAME)
     CM
          1
     CRN 74-85-1
     CMF C2 H4
H_2C \longrightarrow CH_2
     9003-07-0 HCAPLUS
RN
     1-Propene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 115-07-1
     CMF C3 H6
H_3C-CH=CH_2
     9003-39-8 HCAPLUS
RN
     2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 88-12-0
     CMF C6 H9 N O
```

RN 9004-54-0 HCAPLUS

CN Dextran (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 24937-78-8 HCAPLUS

CN Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4 CMF C4 H6 O2

 $AcO-CH=CH_2$ 

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

RN 25038-59-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

L171 ANSWER 6 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:3478 HCAPLUS

DOCUMENT NUMBER: 140:65282

TITLE: Wound dressing for controlled release of ionic silver

INVENTOR(S): Bowler, Phillip; Parsons, David; Walker, Michael

PATENT ASSIGNEE(S): U

SOURCE: U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO.
    PATENT NO.
                     KIND DATE
                                                             DATE
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                             20040101 US 2003-603301 20030625 <--
    US 2004001880
                      A1
                            20040108 CA 2003-2490847
20040108 WO 2003-GB2780
                       AA
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                                                            20030627 <--
    WO 2004002384
                      A1
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            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
           LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
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        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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                       T2 20051215 JP 2004-516961
    JP 2005537823
                                                           20030627 <--
PRIORITY APPLN. INFO.:
                                        GB 2002-15023
                                                           A 20020628 <--
                                                          W 20030627 <--
                                        WO 2003-GB2780
```

ED Entered STN: 04 Jan 2004

AB The invention provides for the use of an effective amount of silver, e.g., 0.1% to 20% by weight, in the manufacture of a wound dressing with antimicrobial

activity comprising an anionic, amphoteric or hydrophilic polymer. The dressing, when applied to the wound, gives a controlled release of ionic silver into the wound fluid for the prevention of staining of the underlying tissue. For example, no staining was obtained with the use of silver-containing dressings Aquacel-Ag and Acticoat 7 when applied to human ulcer tissue and left in contact with the wound for 24 h, compared to that of saline used as a control.

IC ICM A61L015-00

INCL 424445000

CC 63-7 (Pharmaceuticals)

IT Drug delivery systems

(controlled-release; polymer wound dressings for controlled release of ionic silver)

IT Polymers, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hydrophilic; polymer wound dressings for controlled release of ionic silver)

L171 ANSWER 7 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:622578 HCAPLUS

DOCUMENT NUMBER: 139:169330

TITLE: Silver-containing antimicrobial compositions

INVENTOR(S): Gibbins, Bruce L.; Hopman, Lance D.

PATENT ASSIGNEE(S): Acrymed, USA

SOURCE: U.S., 29 pp., Cont.-in-part of U.S. Ser. No. 191,223.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

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KIND
                                             APPLICATION NO.
                                  DATE
                                                                      DATE
     PATENT NO.
                          ----
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                                  20030812 US 2000-675892 20000929 <-- 20020312 US 1998-191223 19981113 <--
     US 6605751
                         B1
                          B1
     US 6355858
                                             US 2003-441275
                                  20040115
     US 2004010215
                          A1
                                                                     20030519 <--
                          B2
     US 6897349
                                  20050524
 US 2005226931
                                             US 2004-978556 20041101 <--
US 1997-971074 A2 19971114 <--
US 1998-191223 A2 19981113 <--
US 1999-157000P P 19991001 <--
US 2000-212455P P 20000619 <--
US 2000-675892 A1 20000929 <--
US 2003-441275 A1 20030519 <--
                          . A1
                                              US 2004-978556
                                                                      20041101 <--
                                  20051013
PRIORITY APPLN. INFO.:
                                                                A1 20030519 <--
                                              US 2003-441275
     Entered STN: 13 Aug 2003
ED
     The present invention comprises methods and compns. for making a
AB
     silver-containing antimicrobial hydrophilic material. More
     particularly, the present invention comprises methods and compns.
     for stabilized silver antimicrobial devices comprising a matrix comprising
     a polymer network and a non-gellable polysaccharide, and an active agent.
     The matrix may be formed into any desired shape for its desired uses. The
     incorporation of the antimicrobial agent, penicillin G, into the matrix
     was evaluated by dissolving 1+106 units of penicillin G powder into
     50 mL of water. Acrylamide, methylenebisacrylamide, glycerol, and a guar
     gum/isopropyl alc. mixture were added 900 mL water and mixed for 2 h. The
     penicillin solution was then added along with TEMED dissolved in 25 mL water.
     After thorough mixing, ammonium persulfate in 25 mL water was added and
     mixed thoroughly. The mixture was then poured into sheet molds and allowed
     to gel. The sheets of semi-solid gel material were stripped from the mold
     and dehydrated to approx. 7% their original water content for storage.
     Disks of 0.7 cm diameter were cut from the sheets. These results demonstrate
     the release of active penicillin G after its incorporation into the
     matrix.
     ICM A61F013-00
INCL 602041000; 602043000; 602048000
     63-6 (Pharmaceuticals)
IT
     Antibodies and Immunoglobulins
     Ceramides
     Collagens, biological studies
     Elastins
     Fatty acids, biological studies
     Fibronectins
     Glycerides, biological studies
     Glycolipids
     Growth factors, animal
     Interferons
     Interleukin 8
     Interleukins
     Laminins
     Metals, biological studies
     Mucopolysaccharides, biological studies
     Petrolatum
     Platelet-derived growth factors
       Polymers, biological studies
     Polysaccharides, biological studies
     Polysiloxanes, biological studies
     Proteins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (silver-containing antimicrobial compns.)
```

(sustained-release; silver-containing antimicrobial compns.)

IT

Drug delivery systems

```
IT
     54-85-3, Isoniazid 56-81-5, Glycerol, biological studies 57-55-6,
     Propylene glycol, biological studies 57-88-5, Cholesterol, biological
              57-92-1, Streptomycin, biological studies
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     Pyrimethamine 60-33-3, Linoleic acid, biological studies 60-54-8,
     Tetracycline 61-33-6, Penicillin G, biological studies 64-17-5,
     Ethanol, biological studies 67-63-0, Isopropyl alcohol, biological
              68-35-9, Sulfadiazine 69-53-4, Ampicillin 70-00-8,
     Trifluridine 71-36-3, Butanol, biological studies 74-55-5, Ethambutol
     80-08-0, Dapsone 97-59-6, Allantoin 98-96-4, Pyrazinamide 100-33-4,
     Pentamidine 114-07-8, Erythromycin 154-21-2, Lincomycin 544-35-4,
     Linoleic acid ethyl ester 564-25-0, Doxycycline 1256-86-6, Cholesteryl
             1397-89-3, Amphotericin B 1398-61-4, Chitin 1403-66-3,
     sulfate
     Gentamicin 1406-05-9, Penicillin 2030-63-9, Clofazimine 4428-95-9,
                7440-22-4, Silver, biological studies 7440-22-4D, Silver,
     Foscarnet
           7447-39-4, Copper chloride, biological studies 7542-37-2,
     Paromomycin 7705-08-0, Ferric chloride, biological studies 7783-90-6,
     Silver chloride, biological studies 7783-96-2, Silver iodide
     7785-23-1, Silver bromide 9000-07-1, Carrageenin 9000-30-0, Guar gum
     9004-32-4, Carboxymethyl cellulose sodium salt 9004-34-6, Cellulose,
     biological studies 9004-54-0, Dextran, biological studies 9004-61-9,
     Hyaluronic acid 9005-49-6, Heparin, biological studies 9007-28-7,
     Chondroitin sulfate 9012-36-6, Agarose 9015-71-8, Corticotropin
     releasing factor 9050-30-0, Heparan sulfate 9061-61-4, Nerve growth
     factor 13292-46-1, Rifampin 13463-41-7, Zinc pyrithione 15606-77-6,
     Silver periodate 18323-44-9, Clindamycin 22916-47-8, Miconazole
     24967-94-0, Dermatan sulfate 25034-58-6, Acrylamide-
    methylenebisacrylamide copolymer 37300-21-3, Pentosan polysulfate 59277-89-3, Acyclovir 62229-50-9, Epidermal growth factor 65277-42-1,
     Ketoconazole 67763-96-6, Insulin-like growth factor 1 67763-97-7,
     Insulin-like growth factor 2 71812-41-4, Tumor angiogenesis factor
     72559-06-9, Rifabutin 81103-11-9, Clarithromycin 82410-32-0,
     Ganciclovir 82419-36-1, Ofloxacin 83869-56-1, Granulocyte
     -macrophage colony stimulating factor 83905-01-5, Azithromycin
     84625-61-6, Itraconazole 85721-33-1, Ciprofloxacin 86386-73-4, Fluconazole 95233-18-4, Atovaquone 101831-37-2, Diclazuril
     106096-92-8, Acidic fibroblast growth factor 106096-93-9, Basic
     fibroblast growth factor 110871-86-8, Sparfloxacin 127464-60-2,
     Vascular endothelial growth factor
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (silver-containing antimicrobial compns.)
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THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 17

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L171 ANSWER 8 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

2003:376496 HCAPLUS ACCESSION NUMBER:

138:374189 DOCUMENT NUMBER:

TITLE: Powders having contact biocidal properties comprising

a polymer and silver

Taylor, Alan John; Roberts, George Andrew Francis; INVENTOR (S):

Wood, Frances Ann

PATENT ASSIGNEE(S): UK

SOURCE: Brit. UK Pat. Appl., 14 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------

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GB 2001-26866
                                                                               20011108 <--
                              A1
                                     20030514
     GB 2381749
                                                   US 2002-289676
                                                                               20021107 <--
                              A1
                                     20030515
     US 2003091653
     EP 1312262
                             A1
                                     20030521
                                                   EP 2002-79840
                                                                               20021108 <--
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                                   US. 2005-183726
GB(2001-26866
                                                                               20050718 <--
         2005250194
                                     20051110
                             A1
PRIORITY APPLN: INFO.
                                                                           Α
                                                                               20011108 <--
                                                  US 2002-289676
                                                                      A3 20021107 <--
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ED Entered STN: 16 May 2003

Powders having contact biocidal properties comprising a polymer carrying AB atomic/metallic or ionic silver. Various polymers may be used including chitosan, carboxymethyl celluloses and carrageenans. Preferably, the polymer is chitin which may be obtained from deproteinated crustacean shells without demineralization. Ionic silver on the polymer is preferably reduced, e.g. photochem. reduced, to atomic/metallic silver. powders can be used as biocidal dusting powders, formulated into pastes, creams, foams and aerosol sprays for pharmaceutical applications or dissolved to form solns. for coating substances such as skin, fabrics, glass, leather and paper to give a bactericidal surface. The powders may be prepared by slurrying a polymer in powder form which can interact with silver ions in a liquid containing silver ions and in which the polymer is insol. and then filtering, washing and drying the powder. Between the washing and drying steps the powder is preferably slurried in a solution of an alkali metal halide and irradiated with natural or artificial light having an UV component to photochem. reduce the silver ions present to metallic silver. Chitin powder was slurried in 100 water. Silver nitrate (0.25 g) dissolved in water was added and the mixture was stirred for 24 h. The solids were filtered off, rinsed well in water and then stirred for 2 h water containing 1 g sodium chloride. The solids were again filtered off and stirred in suspension in water while irradiating with daylight to convert Ag ion to metallic Ag. The chitin/silver complex was then isolated, dried and sieved to give a buff colored powder having considerable biocidal activity.

IC ICM A61K047-36

ICS A01N025-10; A61K033-38; A61K047-38; A61P031-02

CC 63-6 (Pharmaceuticals)

IT Drug delivery systems

(aerosols; powders having contact biocidal properties comprising polymer and silver)

IT Drug delivery systems

(foams; powders having contact biocidal properties comprising polymer and silver)

IT Drug delivery systems

(gels; powders having contact biocidal properties comprising polymer and silver)

IT Drug delivery systems

(ointments, creams; powders having contact biocidal properties comprising polymer and silver)

IT Drug delivery systems

(pastes; powders having contact biocidal properties comprising polymer and silver)

IT Biocides

Particle size distribution

(powders having contact biocidal properties comprising polymer and silver)

IT Polymers, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(powders having contact biocidal properties comprising polymer and silver)

IT Drug delivery systems

# E. Arnold 10/825,930

(powders; powders having contact biocidal properties comprising polymer

and silver)

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS 10 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L171 ANSWER 9 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

2002:449491 HCAPLUS ACCESSION NUMBER:

137:37634 DOCUMENT NUMBER:

Absorbing agents and cover layer which is impermeable TITLE:

to active substances and which contains

channel-formers or removable protective layer of a

transdermal therapeutic system Beier, Cornelia; Kibele, Ralf

Hexal Ag, Germany PATENT ASSIGNEE(S): PCT Int. Appl., 41 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE: LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

INVENTOR (S):

PA	rent :				KINI		DATE		Ĭ		ICAT			<b>-</b>	Di	ATE		
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	W:	AE, CO,					AU, DK,											
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AU	2002	0296															205 <	
	1339								]	EP 2	001-	9905	13		2	0011	205 <	
EP	1339				_B1		2004		a D	<b>a</b> n					O.D.	wa	DIII	
	R:	AT,										ьт,	ьu,	ΝĿ,	SE,	MC,	PT,	
חח	2001						RO,					1500	2		2	0011	205 <	·
	2730																205 <	
	1339						2004										205 <	
	2227						2005	0401		ES 2	001-	1990	513		2	0011	205 <	:
US	2004	0479	01		<b>A1</b>		2004	0311	1	JS 2	003-	4333	73		2	0030	911 <	:
IORIT	Y APP	LN.	INFO	.:							000-						206 <	
	. ,			_					١	MO 2	001-	EP14	280		W 2	0011	205 <	:

- ED Entered STN: 14 Jun 2002
- The invention relates to a cover layer which is impermeable to active AB substances and/or a removable protective layer of a transdermal therapeutic system, these layers consisting of a thermoplastic film and containing either absorption agents and channel forming agents directly or being coated with a polymer support (thermoplastic) containing these substances. Said polymer support can be applied directly during production, either over the entire film or in patterns. The thermoplastic film that is used and the polymer support can consist of identical or different materials.
- IC ICM A61K009-70
- CC 63-5 (Pharmaceuticals)

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Drug delivery systems
IT
        (microspheres, glass; absorbing agents and cover layer
        impermeable to active substances and containing channel-formers or
        removable protective layer of a transdermal therapeutic system)
     1314-13-2, Zinc oxide, biological studies
                                                 1327-33-9, Antimony oxide
IT
     1344-28-1, Aluminum oxide, biological studies
                                                     1344-70-3, Copper oxide
     7429-90-5, Aluminum, biological studies
                                              7439-93-2D, Lithium, mixed
             7440-02-0, Nickel, biological studies 7440-22-4,
     oxides
     Silver, biological studies
                                 7440-50-8, Copper, biological studies
     7440-57-5, Gold, biological studies
                                          7631-86-9, Silicon oxide, biological
               11129-60-5, Manganese oxide
                                             12047-27-7, Barium titanium
     trioxide, biological studies
                                    12060-59-2, Strontium-titanium trioxide
     13463-67-7, Titanium dioxide, biological studies
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
    process); TEM (Technical or engineered material use); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
        (absorbing agents and cover layer impermeable to active substances and
        containing channel-formers or removable protective layer of a transdermal
        therapeutic system)
                                            9003-17-2, Polybutadiene
     9003-01-4D, Polyacrylic acid, esters
IT
                            9003-29-6, Polybutene
                                                     9003-31-0, Polyisoprene
     9003-28-5, Polybutene
                             9006-26-2, Polyethylene-maleic anhydride
     9003-53-6, Polystyrene
     copolymer 24937-78-8, Ethylene-vinyl acetate-copolymer
     25014-41-9, Polyacrylonitrile 25053-53-6, Ethylene-methacrylic acid
                 25067-34-9, Ethylene-vinyl alcohol copolymer
                                                                25322-68-3,
     Polyethyleneglycol
                         25322-69-4, Polypropylene glycol
                                                           25722-45-6, Maleic
     anhydride-propylene copolymer
                                     436147-13-6
     RL: POF (Polymer in formulation); TEM (Technical or engineered material
     use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (absorbing agents and cover layer impermeable to active substances and
        containing channel-formers or removable protective layer of a transdermal
        therapeutic system)
IT
     50-70-4, Sorbitol, biological studies
                                             50-99-7, Glucose, biological
              56-81-5, Glycerol, biological studies
                                                     57-48-7, Fructose,
                         59-23-4, Galactose, biological studies
    biological studies
                                  88-12-0, biological studies
               87-99-0, Xylitol
                                                               115-77-5,
     Pentaerythritol, biological studies
                                          149-32-6, Erythrol
                                                                488-81-3,
              608-66-2, Dulcitol
                                    872-50-4, N-Methylpyrrolidone, biological
              3458-28-4, Mannose
                                    9002-89-5D, Polyvinyl alcohol, derivs.
     9003-39-8, Polyvinylpyrrolidone
                                       45007-61-2, Hexitol
    RL: TEM (Technical or engineered material use); THU (Therapeutic use);
    BIOL (Biological study); USES (Uses)
        (absorbing agents and cover layer impermeable to active substances and
        containing channel-formers or removable protective layer of a transdermal
        therapeutic system)
     7440-22-4, Silver, biological studies
ΙT
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
    process); TEM (Technical or engineered material use); THU (Therapeutic
    use); BIOL (Biological study); PROC (Process); USES (Uses)
        (absorbing agents and cover layer impermeable to active substances and
        containing channel-formers or removable protective layer of a transdermal
        therapeutic system)
RN
     7440-22-4 HCAPLUS
CN
     Silver (8CI, 9CI)
                       (CA INDEX NAME)
```

Αg

IT 9003-53-6, Polystyrene 24937-78-8, Ethylene-vinyl

```
acetate-copolymer
     RL: POF (Polymer in formulation); TEM (Technical or engineered material
     use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (absorbing agents and cover layer impermeable to active substances and
        containing channel-formers or removable protective layer of a transdermal
        therapeutic system)
     9003-53-6 HCAPLUS
RN
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN
         100-42-5
     CMF C8 H8
H_2C = CH - Ph
RN
     24937-78-8 HCAPLUS
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 108-05-4
     CMF C4 H6 O2
AcO-CH=CH_2
     CM
          2
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
IT
     9003-39-8, Polyvinylpyrrolidone
     RL: TEM (Technical or engineered material use); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (absorbing agents and cover layer impermeable to active substances and
        containing channel-formers or removable protective layer of a transdermal
        therapeutic system)
     9003-39-8 HCAPLUS
RN
     2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN 88-12-0
     CMF C6 H9 N O
```

L171 ANSWER 10 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:396627 HCAPLUS

DOCUMENT NUMBER:

135:10083

TITLE:

Antimicrobial dental products

INVENTOR(S):

Barry, John; Trogolo, Jeffrey; Pastecki, Elizabeth

PATENT ASSIGNEE(S):

Agion Technologies, Llc, USA

SOURCE:

PCT Int. Appl., 31 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

Coating materials

Dental materials and appliances

8

Particle size distribution

(antimicrobial dental products comprising silver zeolites)

Polymers, biological studies

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(antimicrobial dental products comprising silver zeolites)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

# E. Arnold 10/825,930

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L171 ANSWER 11 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:265285 HCAPLUS

DOCUMENT NUMBER: 134:300843

TITLE: Silver-containing compositions, devices and methods

for making them

INVENTOR(S): Gibbins, Bruce L.; Hopman, Lance D.

PATENT ASSIGNEE(S): Acrymed, USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PA	<b>TENT</b>	NO.			KIN	D :	DATE		i	APPL	I CAT	ION I	NO.			ATE	
						-									-		
WO	2001	0248	39		A1		2001	0412	1	WO 2	000-1	US26	890		2	0000	929 <
WO	2001	0248	39		C2		2002	1114									
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	ΡL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,
		YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM				
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
EP	1216	065			<b>A1</b>		2002	0626	3	EP 2	000-	9705	22		2	0000	929 <
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL							
PRIORITY	Y APP	LN.	INFO	. :					1	US 1:	999-	1570	00P		P 1:	9991	001 <
									1	US 2	000-	2124	55P		P 2	0000	519 <
									1	WO 2	000-1	US26	890	1	W 2	0000	929 <

- ED Entered STN: 13 Apr 2001
- AB The present invention comprises methods and compns. for making a silver-containing antimicrobial hydrophilic material. More particularly, the present invention comprises methods and compns. for stabilized silver antimicrobial devices comprising a matrix comprising a polymer network and a non-gelable polysaccharide, and an active agent. The matrix may be formed into any desired shape for its desired uses.
- IC ICM A61L015-22

ICS A61L015-28; A61L015-44; A61L015-46

- CC 63-7 (Pharmaceuticals)
- IT Interleukin 2

Polymers, biological studies

Polysaccharides, biological studies

Transferrins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (silver-containing wound dressing compns. based on polymer network and non-gelable polysaccharide)

IT Drug delivery systems

(sustained-release; silver-containing wound dressing compns. based on polymer network and non-gelable polysaccharide)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L171 ANSWER 12 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1999:618787 HCAPLUS

DOCUMENT NUMBER:

131:224866

TITLE:

Antimicrobial agents comprising silver-coated zinc oxide micropowder and uncoated zinc micropowder

INVENTOR (S):

Kojima, Kaoru; Takeshima, Toshiki; Saita, Atsuharu;

Nakamura, Hiroshige; Nakane, Michio

PATENT ASSIGNEE(S):

Nisshin Steel Co., Ltd., Japan; Toyo Ink Mfg. Co.,

Ltd

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11263705	_ A2	19990928	JP 1998-66647	19980317 <
/PRIORITY APPLN. INFO.:	<i>(</i>		JP 1998-66647	19980317 <
ED Entered STN: 28 Se	p 1999		5	

AB The antimicrobial agents, which show excellent antimicrobial action in a short time and are stable to light, comprise a mixture of ZnO micropowder with average particle size ≤1 μm coated with Ag or Ag alloy and uncoated ZnO micropowder. The plastic compns. containing the antimicrobial agents are useful as materials for wallpaper, carpets, sanitary products, cooking utensils, medical goods, fibers for clothes, food containers, packaging films, etc. ZnO micropowder (average particle size 0.8 μm) was coated with Ag by sputtering. A composition containing J 740 (polypropylene resin) 100, the Ag-coated ZnO

micropowder 0.1, Irganox B 225 0.2, Tinuvin 326 0.1, Sanol LS 770 0.2, and uncoated ZnO 0.25 part was injection-molded at 220° to give a white plate. The plate inhibited growth of Staphylococcus aureus and fungi. The plate was exposed to sunlight for 30 days to show no change in the color.

IC ICM A01N059-16

ICS A01N025-10; A01N025-34; C08K009-02; C08L101-00

CC 5-2 (Agrochemical Bioregulators)

Section cross-reference(s): 38, 42, 63

IT Polycarbonates, uses

# Polymers, uses

RL: TEM (Technical or engineered material use); USES (Uses) (light-stable antimicrobial agents comprising Ag-coated ZnO micropowder and uncoated ZnO micropowder for resin compns.)

L171 ANSWER 13 OF 103 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1991:88679 HCAPLUS

DOCUMENT NUMBER:

114:88679

TITLE:

Bactericidal silver-containing water-soluble oxide

glass for topical application

INVENTOR(S):

Gilchrist, Thomas Giltech Ltd., UK

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

Eng

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9008470	A1	19900809	WO 1990-GB125	19900129 <

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W: JP, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE
                                                                  19900129 <--
    EP 455706
                         A1
                               19911113
                                           EP 1990-902653
    EP 455706
                         В1
                               19970402
        R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE
                                           JP 1990-502679
    JP 04503018
                               19920604
                                                                  19900129 <--
                         Т2
    JP 2989888
                         B2
                               19991213
    AT 150935
                         E
                               19970415
                                           AT 1990-902653
                                                                  19900129 <--
    ES 2099708
                        T3
                               19970601
                                           ES 1990-902653
                                                                  19900129 <--
    US 5470585
                               19951128
                                           US 1995-421005
                                                                  19950412 <--
                         Α
PRIORITY APPLN. INFO.:
                                           GB 1989-1846
                                                               A 19890127 <--
                                           GB 1989-2785
                                                              A 19890208 <--
                                           GB 1989-4806
                                                              A 19890302 <--
                                           WO 1990-GB125
                                                              W 19900129 <--
                                           US 1991-688546
                                                              B1 19910610 <--
                                           US 1993-121411
                                                               B1 19930915 <--
```

ED Entered STN: 09 Mar 1991

AB A medicinal substance for topical application is disclosed. The substance comprises a water-soluble glass containing Ag or a Ag compound Typically, the glass comprises P2O5 and contains Ag2O. The substance may be used for the treatment of wounds, manufacture of catheter and tubing entry points, stoma sites and body passage entrances where bacterial growth and migration occur. The glass may be in the form of a powder, granules, woven into a dressing form, a sinter shaped in a particular way or used as filler in polymers for surface release. Urinary catheter connectors and bags are described. Diagrams of the devices and uses are presented.

IC ICM A01N059-16

ICS A01N025-34; A01N025-12; A61L029-00; A61L002-00; A61K033-38

CC 63-6 (Pharmaceuticals)

IT Polymers, biological studies

RL: BIOL (Biological study)

(silver-containing water-soluble glass as filler for, for topical application)

IT Pharmaceutical dosage forms

(topical, silver-containing water-soluble glass oxide as bactericidal)

=> d iall abeq tech abex 14-16
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' - CONTINUE? (Y)/N:y

L171 ANSWER 14 OF 103 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN DUPLICATE 2

WPIX

ACCESSION NUMBER:

2004-813015 [80]

CROSS REFERENCE:

2005-122650 [13]

DOC. NO. CPI:

C2004-282761

TITLE:

Silver ion complex resinate composition for preventing and/or treating infections and diseases, e.g. wound, and used in wound dressing, i.e. gauzes, or compresses, comprises silver thiosulfate ion complex bound to anion exchange regin

exchange resin.

DERWENT CLASS:

A13 A96 B07 D22

INVENTOR(S):
PATENT ASSIGNEE(S):

CAPELLI, C C; CAPELLI, C J
(BIOI-N) BIOINTERFACE TECHNOLOGIES INC

COUNTRY COUNT:

108

PATENT INFORMATION:

WEEK LA PG MAIN IPC PATENT NO KIND DATE \_\_\_\_\_ US 2004223944 A1 20041111 (200480)\* 14 A61K033-38<--WO 2005007077 A2 20050127 (200513) EN 38 A61K000-00<--RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

#### APPLICATION DETAILS:

PATENT NO KIND APPLICATION	DATE
US 2004223944 Al Provisional US 2003-46486	
WO 2005007077 A2 WO 2004-WS120	

PRIORITY APPLN. INFO: US 2003-464867P 20030423; US 2004-824309 20040414 INT. PATENT CLASSIF.:

MAIN:

A61K000-00; A61K033-38

BASIC ABSTRACT:

US2004223944 A UPAB: 20051114

NOVELTY - Silver ion complex resinate composition comprising a silver thiosulfate ion complex bound to an anion exchange resin, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) preventing and treating an infection, comprising:
- (a) providing a patient exhibiting symptoms of infection, and silver ion complex resinate composition; and
- (b) administering the silver ion complex to the patient under conditions, so that a symptom(s) of the infection is reduced; and
- (2) attaching silver thiosulfate ion complexes on a resin, comprising:
- (a) providing an anion exchange resin, and an aqueous solution of silver thiosulfate ion complexes; and
- (b) introducing the resin to the solution under conditions, so that at least a portion of the complexes attaches to the resin to form a partially loaded resinate.

ACTIVITY - Antibacterial; Antiviral; Antifungal; Vulnerary; Antiulcer; Gastrointestinal-Gen.

Saline (1 ml) was added to resinate containing silver thiosulfate ion-complex solution. At 1 and 3 hour time points, filter paper discs (7 mm diameter) were soaked with the saline supernatant to test for the release of antimicrobial silver. The antimicrobial studies were performed by first plating Escherichia coli (ATCC 29213) or E. coli (ATCC 225922) on tryptic soy agar. The culture plates were incubated at 37 deg. C overnight. The zone of microbial growth inhibition (ZOI) was measured from the edge of each filter disc. The results were 2.5 mm (2nd wash), 1.75 mm (saline 1 hour), and 2 mm (saline 3 hour), compared with the control (1 % silver nitrate) of 0 mm, respectively.

USE - The invention is for use in a wound dressing, i.e. gauzes, compresses, hydrocolloids, or xerogels, or medical device, i.e. implants, sutures, or other materials left in a body cavity for a time, useful in a medical apparatus. The medical device is configured for placement inside a patient. It is e.g. catheter, preferably urinary catheter, ostomy appliance, or incontinent device. The invention is used for preventing and

treating infections (claimed) and diseases. Medical devices include wound care devices, drug delivery devices, and personal protection devices. The medical implants include urinary catheters, intravascular catheters, dialysis shunts, wound drain tubes, skin sutures, vascular grafts, implantable meshes, intraocular devices, and heart valves. Wound care devices include general wound dressings, biologic graft materials, tape closures and dressings, and surgical incise drapes. Drug delivery devices include drug delivery skin patches, drug delivery mucosal patches, and medical sponges. Body cavity and personal protection devices include tampons, sponges, surgical and examination gloves, and toothbrushes. The invention is useful for prevention and/or treatment of wounds, e.g. aseptic wounds, contused wounds, incised wounds, lacerated wounds, non-penetrating wounds (i.e., wounds in which there is no disruption of the skin but there is injury to underlying structures), open wounds, penetrating wound, perforating wounds, puncture wounds, septic wounds, and subcutaneous wounds; conditions related to wounds or sores including burns, anthrax, tetanus, gas gangrene, scarlatina, erysipelas, sycosis barbae, folliculitis, impetigo contagiosa, or impetigo bullosa. Sores are bed sores, canker sores, or chrome sores. Ulcers are e.g., peptic ulcer, duodenal ulcer, gastric ulcer, gouty ulcer, diabetic ulcer, hypertensive ischemic ulcer, stasis ulcer, venous ulcer, symptomatic ulcer, tropical ulcer, and venereal ulcer, e.g. caused by gonorrhea.

ADVANTAGE - The invention is stable in a saline environment, and capable of releasing antimicrobial silver ion.

Dwg.0/0

FILE SEGMENT: CPI FIELD AVAILABILITY: AB; DCN

MANUAL CODES: CPI: A10-E22; A12-V00V; B04-C03; B05-A03B; B05-C05;

B10-B03B; B10-B04B; B12-M02D; B14-A01; B14-A02; B14-E10C; B14-N14; B14-N17A; B14-N17B; D09-C04B

TECH UPTX: 20041213

TECHNOLOGY FOCUS - POLYMERS - Preferred Component: The resin comprises a quaternary amine(s) attached to a polymer, which comprises polystyrene in the form of beads.

Preferred Material: The resin is cholestyramine.

Preferred Dimension: The beads are less than 0.8 mm in average diameter.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Compound: The quaternary amine is triethylamine or triethylethanolamine.

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Parameter: The silver thiosulfate ion complexes comprise a thiosulfate ion-to-silver ion molar ratio of less than 3:1, preferably at least1.3:1.

ABEX UPTX: 20041213

EXAMPLE - A silver thiosulfate ion-complex solution (B) was made by dissolving silver thiosulfate ion complex (315 mg) into distilled water (10 ml). Silver thiosulfate ion complex resinate was prepared by adding (B) (5 ml), into cholestyramine resin (50 mg). The mixture was left to equilibrate over a 12 hour period, and shaken periodically through this equilibration period. After the 12 hour period, the first supernatant was drained. An additional (B) (3.5 ml) was added to B/cholestyramine resin. The mixture was left to equilibrate over a 12 hour period, and shaken periodically through this equilibration period. After the 12 hour period, the second supernatant was drained, leaving behind a cholestyramine resin loaded with B. The resulting resinate exhibited no discoloration when stored in ambient light.

L171 ANSWER 15 OF 103 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2005-122650 [13] WPIX

CROSS REFERENCE: 2004-813015 [80]

DOC. NO. CPI:

C2005-040685

TITLE:

Composition useful in a wound dressing e.g. gauzes,

compresses, hydrocolloids and xerogels comprises a silver thiosulfate ion complex bound to an anion exchange resin.

DERWENT CLASS:

A96 B05 C03 D22

INVENTOR(S):

CAPELLI, C J

PATENT ASSIGNEE(S):

(BIOI-N) BIOINTERFACE TECHNOLOGIES INC

COUNTRY COUNT:

108

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK L	A PG	MAIN IPC

WO 2005007077 A2 20050127 (200513)\* EN 38 A61K000-00<--

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE

DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG

US UZ VC VN YU ZA ZM ZW

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005007077	A2	WO 2004-US12016	20040416

2003-464867 INT. PATENT CLASSIF.: MAIN.

20040414; ŪS

20030423 🦼

BASIC ABSTRACT:

WO2005007077 A UPAB: 20050224

NOVELTY - A composition comprises a silver thiosulfate ion complex bound to an anion exchange resin.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) an apparatus comprises a medical device impregnated with the composition; and
- (2) a method (M1) of attaching silver thiosulfate ion complexes on a resin involving: providing an anion exchange resin, and an aqueous solution of silver thiosulfate ion complexes; and introducing the resin to the solution under conditions such that at least a portion of the complexes attaches to the resin to form a partially loaded resinate.

ACTIVITY - Vulnerary; Antibacterial; Virucide; Fungicide; Dermatological; Antidiabetic; Antiulcer; Antiseborrheic; Antipsoriatic; Antiinflammatory; Gastrointestinal-Gen.; Vasotropic; Antigout; Hypotensive; Vasotropic.

MECHANISM OF ACTION - Bacterial growth inhibitor.

An in vitro antimicrobial activity was carried out as follows: Filter paper discs (7 mm diameter) were soaked with a silver thiosulfate ion-complex solution (prepared by dissolving silver thiosulfate ion complex (315 mg) into distilled water (10 ml) and then added sodium sulfite (100 mg) to aid in stabilizing the silver thiosulfate ion complex) (test solution). The antimicrobial study was performed by first plating E. coli (ATCC 225922) on tryptic soy agar. A disc containing the test solution was placed on the microbial lawns. The culture plates were incubated at 37 deg. C overnight. The zone of microbial growth inhibition (ZOI) was measured from the edge of each filter disc. The ZOI for the test solution was 15 mm. Thus the test solution demonstrates a high antimicrobial efficacy.

USE - In a wound dressing e.g. gauzes, compresses, hydrocolloids and xerogels; for reducing infection; for delivering to a patient with wound; in apparatus comprising a medical device impregnated with the composition e.q. implant, suture and other material left in a body cavity for a period of time (preferably catheter such as urinary catheter; ostomy appliance and an incontinent device) (all claimed); in the treatment and prevention of infections and diseases e.g. skin infections such as impetigo, infected diabetic ulcers, venous stasis ulcers, infected surgical wounds, burns, acne, psoriasis and other topical infections; necrosis; wounds e.g. aseptic wounds, contused wounds, incised wounds; sores e.g. bed sores, canker sores, chrome sores, cold sores, pressure sores; ulcer e.g. peptic ulcer, duodenal ulcer, gastric ulcer, gouty ulcer, diabetic ulcer, hypertensive ischemic ulcer, stasis ulcer, ulcus cruris (venous ulcer), sublingual ulcer, submucous clear, symptomatic ulcer, trophic ulcer, venereal ulcer e.g. caused by gonorrhoea (including urethritis, endocervicitis and proctitis); conditions related to wounds or sores e.g. burns, anthrax, tetanus, gas gangrene, scarlatina, erysipelas, sycosis barbae, folliculitis, impetigo contagiosa, or impetigo bullosa. The medical implants includes intravascular catheter, dialysis shunts, wound drain tubes, skin sutures, vascular grafts, implantable meshes, intraocular devices, and heart valves.

ADVANTAGE - The composition reduces infection; releases stable antimicrobial silver ion complexes when placed in a saline environment e.g. wound. The composition provides antibacterial, antiviral and antifungal activities; controlled release of the silver thiosulfate ion complex; provides improved water stability. Dwg.0/0

FILE SEGMENT: CPI
FIELD AVAILABILITY: AB; DCN

FIELD AVAILABILITY: AB; DCN
MANUAL CODES: CPI: A1

CPI: A12-V00V; B04-C03B; B04-C03D; B05-A03B; B05-C05; B10-B03B; B10-B04B; B11-C04B; B14-A01; B14-A02; B14-A04; B14-C02; B14-C03; B14-E08; B14-E10; B14-F02B; B14-F02D; B14-F09; B14-N17B; B14-S04; C04-C03B; C04-C03D; C05-A03B; C05-C05; C10-B03B; C10-B04B; C11-C04B; C14-A01; C14-A02; C14-A03; C14-C03; C14-E08; C14-E10; C14-F02B; C14-F02D; C14-N17B; C14-S04; D09-A01A

TECH UPTX: 20050224

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: The resin comprises at least one quaternary amine attached to a polymer. The polymer comprises polystyrene. The polystyrene is in the form of beads. The beads has an average diameter of at most 0.8 mm. The resin is cholestyramine.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: The quaternary amine is selected from triethylamine and triethylethanolamine. Preferred Method: In (M1), the silver thiosulfate ion complexes comprise a thiosulfate ion-to-silver ion in a molar ratio of less than 3: 1 (preferably at least 1:1, especially at least 1.3:1).

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Device: The medical device is configured for placement inside a patient. The medical device is selected from implant, suture and other material left in a body cavity for a period of time (preferably catheter such as urinary catheter; ostomy appliance and an incontinent device).

ABEX UPTX: 20050224

EXAMPLE - A silver thiosulfate ion complex was produced by first making a silver chloride precipitate in an aqueous (i.e. deionized water) solution. The silver chloride precipitate/aqueous solution was made by mixing silver

nitrate (20 ml) with sodium chloride (22 ml) in a separately funnel. To the resulting silver chloride precipitate/aqueous solution was added sodium thiosulfate (60 ml). The mixture was agitated. After work up, silver thiosulfate ion complex (10.03 g) was formed. A silver thiosulfate ion-complex solution was prepared by dissolving silver thiosulfate ion complex (315 mg) into distilled water (10 ml). To this solution was added sodium sulfite (100 mg) to aid in stabilizing the silver thiosulfate ion complex. The resulting solution was clear and colorless.

L171 ANSWER 16 OF 103 WPIX COPYRIGHT 2006 THE THOMSON CORP ON STN ACCESSION NUMBER: 2006-055022 [06] WPIX 2001-112081 [12]; 2002-083108 [11]; 2003-040002 [03]; CROSS REFERENCE: 2003-787039 [74]; 2004-374952 [35]; 2005-733851 [75] DOC. NO. CPI: C2006-020604 TITLE: Formulation useful as dietary supplement for treating, preventing or reversing osteoporosis and bone loss, and preventing muscle cramps, comprises one or more polypeptides having phytase activity. DERWENT CLASS: A96 B04 C06 D13 D15 D16 BARTON, N R; BAUM, W; GARRETT, J B; GRAY, K A; KRETZ, K INVENTOR (S): A; ODONOGHUE, E; ROBERTSON, D E; SHORT, J M; ZORNER, P PATENT ASSIGNEE(S): (BART-I) BARTON N R; (BAUM-I) BAUM W; (GARR-I) GARRETT J B; (GRAY-I) GRAY K A; (KRET-I) KRETZ K A; (ODON-I) ODONOGHUE E; (ROBE-I) ROBERTSON D E; (SHOR-I) SHORT J M; (ZORN-I) ZORNER P COUNTRY COUNT: PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC

US 2005281792 A1 20051222 (200606)\* 82 A61K045-00<--

### APPLICATION DETAILS:

PATENT NO KI	ND	A	PPLICATION	DATE
US 2005281792 A	1 Div ex Cont of CIP of CIP of CIP of CIP of	US US US US	1997-910798 1999-259214 1999-291931 1999-318528 2000-580515 2001-866379	19970813 19990301 19990413 19990525 20000525 20010524 20040901

## FILING DETAILS:

	)
US 2005281792 Al Div ex US 5876997 Cont of US 6110719 CIP of US 6183740 CIP of US 6190897 CIP of US 6720014 CIP of US 6855365	

PRIORITY APPLN. INFO: US 2004-933115 20040901; US 1997-910798 19970813; US 1999-259214 19990301; US 1999-291931 19990413; US (1999-318528 19990525; US

2000-580515 20000525; US 2001-866379 20010524

INT. PATENT CLASSIF .:

MAIN: A61K045-00

SECONDARY: A61K038-46; C12N009-16

BASIC ABSTRACT:

US2005281792 A UPAB: 20060124

NOVELTY - A formulation (I), comprising at least one polypeptide (P1) having phytase activity, where the polypeptide is chosen from a polypeptide encoded by a nucleic acid comprising a nucleotide sequence of a fully defined 1901 base pair (SEQ ID Number 7) sequence given in the specification or a polypeptide having an amino acid sequence of a fully defined 432 amino acid (SEQ ID Number 8) sequence given in the specification, is new.

DETAILED DESCRIPTION - A formulation (I), comprises at least one polypeptide (P1) having phytase activity, where (P1) is chosen from:

- (a) a polypeptide encoded by a nucleic acid comprising a nucleotide sequence of a fully defined 1901 base pair (SEQ ID Number 7) sequence given in the specification, and where nucleotide 389 is G, 390 is A, 437 is T, 438 is G, 439 is G, 470 is C, 472 is T, 476 is T, 477 is G, 478 is T, 689 is G, 690 is A, 691 is G, 728 is T, 729 is A, 730 is T, 863 is T, 864 is G, or 1016 is G, or their combination, and the polynucleotide encodes a phytase;
- (b) a polypeptide having an amino acid sequence of a fully defined 432 amino acid (SEQ ID Number 8) sequence given in the specification and having one or more amino acid modifications chosen from W68E, Q84W, A95P, K97C, S168E, R181Y, N226C, Y277D or their combination, where the polypeptide has phytase activity;
- (c) a polypeptide encoded by a nucleic acid comprising a nucleotide sequence of a fully defined 1323 base pair (SEQ ID Number 1) sequence given in the specification;
- (d) a polypeptide having an amino acid sequence of a fully defined 440 amino acid (SEQ ID Number 2) sequence given in the specification; or

(e) a combination of (a)-(d).

INDEPENDENT CLAIMS are also included for:

- (1) a pharmaceutical composition (C1) comprising at least one (P1) and a excipient;
- (2) a kit (K1) comprising (I) or (C1) and instructions for using (I) or (C1);
  - (3) an immobilized phytase (II) comprising (P1);
  - (4) a dietary supplement (III) comprising (II);
  - (5) a pharmaceutical composition (C2) comprising (II);
- (6) a fertilizer or soil additive (IV) comprising (II), or at least
  one (P1);
- (7) a liquid supplement (V) for preventing muscle cramps, comprising
  (I);
  - (8) a hydrating agent (VI), comprising (I);
- (9) a tissue culture or cell culture media or cell culture media additive (VII) comprising at least one (P1);
  - (10) a plant food additive (VIII) comprising at least one (P1);
- (11) reducing (M1) pollution and increasing nutrient availability in an environment or environmental sample by degrading environmental phytic acid, involves applying to the environmental or environmental sample an effective amount of a composition comprising at least one (P1).

ACTIVITY - Osteopathic; Muscle-Relaxant.

No biological data given.

MECHANISM OF ACTION - None given.

USE - (I) is a dietary supplement useful for treating, preventing or reversing osteoporosis or bone loss, and preventing muscle cramps. The liquid supplement is useful for preventing muscle cramps. The method is

useful for reducing pollution and increasing nutrient availability in an environment or environmental sample by degrading environmental phytic acid, where the environment or environmental sample comprises a soil or a body of water. The body of water is well, pond, lake, river, aquifer or reservoir. The environment or environmental sample comprises a sewage, sewage effluent, landfill or manure pond. (All claimed).

The immobilized phytase is useful in foodstuffs for improving the feeding value of phytate rich ingredients.

Dwq.0/8

FILE SEGMENT: CF FIELD AVAILABILITY: AF

CPI AB; DCN

MANUAL CODES:

CPI: A12-V01; A12-W11F; B03-A; B03-B; B03-C; B03-D; B03-E; B03-F; B03-G; B03-H; B03-J; B03-K; B04-A08; B04-A10; B04-B01B; B04-L01; B04-L05A; B04-N01; B04-N04; B05-A01A; B05-A01B; B05-A02; B05-A03A; B05-A03B; B05-B01P; B05-B02A3; B05-B02C; B05-C06; B05-C07; B06-D01; B06-D09; B06-F03; B07-B03; B10-A06; B10-A07A; B10-A17; B10-A22; B10-B02A; B10-B02D; B10-B02E; B10-B02H; B10-B02J; B10-C04D; B10-E04A; B14-J05A; B14-N01; C03-A; C03-B; C03-C; CO3-D; CO3-E; CO3-F; CO3-G; CO3-H; CO3-J; CO3-K; C04-A08; C04-A10; C04-B01B; C04-L01; C04-L05A; C04-N01; C04-N04; C05-A01A; C05-A01B; C05-A02; C05-A03A; C05-A03B; C05-B01P; C05-B02A3; C05-B02C; C05-C06; C05-C07; C06-D01; C06-D09; C06-F03; C07-B03; C10-A06; C10-A07A; C10-A17; C10-A22; C10-B02A; C10-B02D; C10-B02E; C10-B02H; C10-B02J; C10-C04D; C10-E04A; C14-J05A; C14-N01; C14-T; D03-H01T2; D04-A01J; D04-B06; D05-A01A2; D05-A01B3; D05-A04A; D05-H01

TECH

UPTX: 20060124

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Formulation: (I) further comprises at least one vitamin, at least one additional enzyme, at least one mineral or at least one herb or plant extract, at least one amino acid or amino acid derivative, or their combination. The mineral or metal is chosen from aluminum, antimony, barium, beryllium, bismuth, boron, bromide, bromine, cadmium, calcium, cerium, cesium, chloride, chromium cobalt, copper, dysprosium, erbium, europium, fluoride, fluorine, gadolinium, gallium, germanium, gold, hafnium, holmium, indium, iodine, iridium, iron, lanthanum, lithium, lutetium, magnesium, manganese, molybdenum, neodymium, nickel, niobium, osmium, palladium, phosphorous, platinum, potassium, praseodymium, promethium, rhenium, rhodium, rubidium, ruthenium, samarium, scandium, selenium, silicon, silver, sodium, strontium, sulfur, tantalum, tellurium, terbium, thorium, thulium, tin, titanium, tungsten, vanadium, xinconium, ytterbium, yttrium, zinc, zirconium and their combinations. (I) further comprises at least one composition chosen from diatomaceous earth, charcoal, choline, inositol, biotin, para-amino benzoic acid (PABA), alpha-lipoic acid, carotenoid, beta carotene, coenzyme Q10, chondroitin, melatonin, lecithin, brewer's yeast and their combinations. The one herb or plant extract is chosen from alfalfa, ginseng, American ginseng, Asian red ginseng, Asian white ginseng, Siberian ginseng, Brazilian ginseng, astragalus, bilberry, black cohosh, cascara sagrada, cat's claw, cayenne, dong quai, Echinacea, eucalyptus, feverfew, garlic, ginkgo biloba, goldenseal, gotu kola, horsetail, maca, a mushroom, Maitake mushroom, Reishi mushroom shuitake mushroom, leuzea, rhodiola, milk thistle, noni, pau d'arco, papaya, pygeum, saw palmetto, schizandra, senna, suma, wild yam, willow, yucca, wheat grass, barley grass, parsley, broccoli, acerola cherries, aloe vera, quercitin, pine bark, grape seed, green tea, red wine, grapefruit extract, ginger, oat straw, sarsaparilla, oil, walnut oil, safflower oil soybean

oil, peanut oil, fish oil, salmon oil, evening primrose oil, borage oil, bee pollen, bee propolis, royal jelly, bran, oat bran, wheat bran, fiber, soy, psyllium, apple pectin, protein, egg protein, milk protein, soy protein, rice protein, whey, algae, Spirulina, Chlorella, dulse, kelp, Dunaliella salina and their combination. The probiotic is chosen from Lactobacillus species such as L.acidophilus, L.bifidus, L.sporogenes, L.casei, L.rhamnosus and L.plantarum, Streptococcus thermophilus, Bifidobacterium sp., Escherichia, Enterococcus, Bacillus and Saccharomyces sp.. The additional enzyme is chosen from phytase, amylase, bromelain, cellulase, chymopapain, diastase, glucoamylase, hemicellulase, hyaluronidase, invertase, lactase, lipase, maltase, pancreatin, papain, pectinase, pepsin, plasmin, protease, rennin and their combination. The vitamin is chosen from vitamin B, thiamine (vitamin B1), riboflavin (vitamin B2,) nicotinic acid (niacin, vitamin B3), pantothenic acid (vitamin B5), pyridoxine (Vitamin B6), B7, folic acid (vitamin B9), cyanocobalamin (vitamin B12), vitamin C, vitamin D, vitamin D1, vitamin D2, vitamin D3, vitamin E, vitamin K1, vitamin K1, vitamin K2, vitamin G, vitamin H, vitamin P and their combination. The amino acid or amino acid derivative is chosen from isoleucine, leucine, lysine, phenylalanine, threonine, tyrptophan, valine, methionine, cysteine, alanine, arginine, aspartic acid, glutamic cid, glycine, histidine, proline, serine, asparagines, glutamine, tyrosine, taurine, glucosamine and their combination. (I) comprises vitamin D3 or calcium or both. (I) further comprises potassium, glucose, CaCl2 or their combination. (I) further comprises at least one enzyme chosen from alpha-galactosidases, beta-galactosidases, lactases, phytases, beta-glucanases, endo-beta-1,3(4)-glucanases, cellulases, xylosidases, galactanases, arabinogalactan endo-1,4-beta-galactosidases and arabinogalactan endo-1,3-beta-galactosidases, endoglucanases, endo-1,2-beta-glucanase, endo-1,3-alpha-glucanase, endo-1,3-beta-glucanase, pectin degrading enzymes, pectinases, pectinesterases, pectin lyases, polygalacturonases, arabinases, rhamnogalacturonases, rhamnogalacturonan acetyl esterases, rhamnogalacturonan-alpha-rhamnosidase, pectate lyases, alpha-galacturonisidases, mannanases, beta-mannosidases, mannan acetyl esterases, xylan acetyl esterases, proteases, xylanases, arabinoxylanases, lipases, phospholipases and cutinases. (I) is in the form of a powder, tablet, concentrate, geltab, capsule, spray, aerosol, lotion, adhesive patch or drink. Preferred Composition: (C1) is formulated for oral delivery. (C1) is formulated as a pill, tablet, capsule, spray, aerosol or powder. Preferred Enzyme: (II) is immobilized to a bead, preferably polysorb or polystyrene bead.

sodium or calcium.
ABEX UPTX: 20060124

ADMINISTRATION - (C1) is formulated for oral delivery (claimed). No dosage given.

Preferred Component: (V) or (VI) further comprises glucose, potassium,

EXAMPLE - No relevant example is given.

=> d ibib ab hitstr 17-45
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' - CONTINUE? (Y)/N:y

L171 ANSWER 17 OF 103 USPATFULL on STN DUPLICATE 3
ACCESSION NUMBER: 2003:257328 USPATFULL

TITLE: Dry powders of metal-containing compounds

INVENTOR(S):

Gillis, Scott H., Concord, MA, UNITED STATES Schechter, Paul, Dover, MA, UNITED STATES Burrell, Robert E., Alberta, CANADA

NUMBER KIND DATE -----US 2003180378 A1 20030925 PATENT INFORMATION: <--US 6866871 B2 20050315 B2 20060124 US 6989157 APPLICATION INFO.: US 2002-277298 --- A1 -- 20021022 (10) <--

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-628735, filed on 27 Jul 2000, ABANDONED Continuation-in-part of Ser.

> No. US 2001-916757, filed on 27 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-840637, filed on 23 Apr 2001, PENDING Continuation-in-part of Ser. No. US 2002-128208, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-131509, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-131511, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-131568, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-159587, filed on 30 May 2002, PENDING

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, LEGAL REPRESENTATIVE:

02110

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Page(s)

LINE COUNT: 3343

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Dry powders of metal-containing compounds are disclosed. Methods of preparing and using the dry powders, particularly in the treatment of a subject having a condition, are also disclosed. The metal-containing material can be, for example, an antimicrobial material, an antibacterial material, an anti-inflammatory material, an anti-fungal material, an anti-viral material, an anti-cancer material, a pro-apoptosis material, and/or an MMP modulating material. In certain embodiments, the metal-containing material is an atomically disordered, silver-containing material.

9002-88-4, Polyethylene

(silver-coated; dry powders of metal-containing compds. for therapeutic uses)

9002-88-4 USPATFULL RN

Ethene, homopolymer (9CI) (CA INDEX NAME) CN

> CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

L171 ANSWER 18 OF 103 USPATFULL on STN ACCESSION NUMBER: 2003:165524 USPATFULL DUPLICATE 4

Thermoplastic articles exhibiting high TITLE:

surface-available silver

INVENTOR(S): Laridon, Erik, Heverlee, BELGIUM

Haas, Geoffrey, Spartanburg, SC, UNITED STATES Dankel, Robert, Taylors, SC, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2003113378 A1 20030619 <-US 6641842 B2 20031104

APPLICATION INFO.: US 2001-15872 A1 20011212 (10) <--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Milliken & Company, P.O. Box 1927, Spartanburg, SC,

29304

NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 603

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Improvements in increasing the amount of surface-available silver in thermoplastic articles comprising certain silver-containing antimicrobial agents. Such an invention requires the incorporation of a sufficient amount of a carboxylic acid salt within the thermoplastic article simultaneously with the necessary silver-containing antimicrobial agent. Certain carboxylic acid salts are standard acid scavengers and lubricants for certain thermoplastic applications; however, the amounts required within this inventive thermoplastic article are in excess of that commonly added within such articles, and the types of acid scavengers possibly added within such target thermoplastic articles are preferably neutralized hydrotalcite compounds, thereby permitting the carboxylic acid salt to function in the inventive manner. Surprisingly, such a high amount of such standard salts, as well as potentially other non-standard salts, present within the target thermoplastic cause the release of greater amounts of silver to the target article's surface, thereby permitting a greater degree of antimicrobial activity, among other potential benefits for such an increase in surface-available silver. Methods of producing such inventive thermoplastics are also encompassed within this invention.

IT 9002-88-4

(DOW 8454N, Dowlex 2552E; thermoplastic articles exhibiting high surface-available silver)

RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

IT 9003-07-0

(Himont Profax 6301 NT; thermoplastic articles exhibiting high surface-available silver)

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1

CMF C3 H6

 $_{\rm H_3C}-_{\rm CH}=_{\rm CH_2}$ 

L171 ANSWER 19 OF 103 USPATFULL on STN

DUPLICATE 5

ACCESSION NUMBER:

2003:78126 USPATFULL

TITLE: INVENTOR (S): Treatment of inflammatory skin conditions Burrell, Robert Edward, Sherwood Park, CANADA

Yin, Hua Qing, Sherwood Park, CANADA

NUMBER KIND DATE \_\_\_\_\_\_\_

US 2003054046 A1 20030320 US 6939568 B2 20050906 US 2002-131511 A1 20020423 (10) PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-840637, filed

on 23 Apr 2001, PENDING

NUMBER DATE

PRIORITY INFORMATION: US-2001-285884P 20010423 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN

CIRCLE, SUITE 201, BOULDER, CO, 80303

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

2 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 2334

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to the use of one or more antimicrobial metals, most preferably silver, preferably formed with atomic disorder, and preferably in a nanocrystalline form, for the treatment of inflammatory skin conditions. The nanocrystalline antimicrobial metal of choice may be used in the form of a nanocrystalline coating of one or more antimicrobial metals, a nanocrystalline powder of one or more antimicrobial metals, or a solution containing dissolved species from a nanocrystalline powder or coating of one or more antimicrobial metals.

IT 9002-88-4, Polyethylene

(high-d., dressings, silver-coated; topical crystalline antimicrobial metals for treatment of inflammatory skin conditions)

RN9002-88-4 USPATFULL

Ethene, homopolymer (9CI) (CA INDEX NAME) CN

CM

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

L171 ANSWER 20 OF 103 USPATFULL on STN

DUPLICATE 7

ACCESSION NUMBER: 2002:37296 USPATFULL

TITLE:

Dendrimer biocide-silver nanocomposites: their

## E. Arnold 10/825,930

preparation and applications as potent antimicrobials INVENTOR(S): Cooper, Stuart L., Chicago, IL, UNITED STATES

Chen, Chris Z., Trooper, PA, UNITED STATES

NUMBER DATE

PRIORITY INFORMATION: US 2000-210888P 20000609 (60) <--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Connolly Bove Lodge & Hutz LLP, P.O. Box 2207,

Wilmington, DE, 19899-2207

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 460

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel cationic dendrimer biocide-silver nanocomposite and methods for its use as a biocide. The biocidal nanocomposites of the present invention are effective against a variety of microbial species, including anthrax. The invention is also highly stable and safe for exposure to human skin. The invention has applications as an antibiological warfare agents, antimicrobial agent for surface coatings and as a general biocide that is safe for human exposure.

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene.

**9003-53-6**, Polystyrene

(preparation of dendrimer biocide-silver nanocomposites as potent antimicrobials)

RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1 CMF C3 H6

 $H_3C-CH=CH_2$ 

RN 9003-53-6 USPATFULL

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$ 

L171 ANSWER 21 OF 103 USPATFULL on/STN

ACCESSION NUMBER: 2005:220620 USPATFULL

Anti-microbial and antifungal fluid conduits and TITLE:

methods of manufacture thereof

KIND

Foss, Stephen W., UNITED STATES INVENTOR(S):

PATENT ASSIGNEE(S): FOSS MANUFACTURING CO., INC., Hampton, NH, UNITED

STATES (U.S. corporation)

\_\_\_\_\_ US 2005191355 A1 20050901 US 2005-48418 A1 20050201 (11) PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-406720, filed

NUMBER

on 2 Apr 2003, PENDING Continuation-in-part of Ser. No. US 2004-762920, filed on 22 Jan 2004, PENDING Division of Ser. No. US 2000-565138, filed on 5 May 2000,

GRANTED, Pat. No. US 6723428

	NUMBER	DATE		
PRIORITY INFORMATION:	US 1999-136261P	19990527	(60)	<
	US 1999-17320#P	19991227	(60)	<
	/US_1999-172285P(	19991217	(60)	<
	US 1999-172533P	19991217	(60)	<
	/US 2000-180536P	20000207	(60)	<
	/US 2000-181251P	20000209	(60)	<
	US 2000-180240P	20000204	(60)	<
DOCUMENT TYPE:	Utility	,		

DOCUMENT TYPE:

FILE SEGMENT:

APPLICATION

PERKINS, SMITH & COHEN LLP, ONE BEACON STREET, 30TH LEGAL REPRESENTATIVE:

FLOOR, BOSTON, MA, 02108, US

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 5 Drawing Page(s)

LINE COUNT: 763

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Antimicrobial/antifungal fluid conduits (are extruded, co-extruded, AΒ molded and/or otherwise thermoformed or thermoset), and films formed on non-thermoplastic conduit walls. One or more inorganic antimicrobial agents are selectively dispersed and concentrated near a surface at which antimicrobial/antifungal properties are desired. The agents resist wear from repeated fluid flows through embedding in a thin thermoplastic layer disposed upon the conduit wall. The fluid conduits preferably comprise high tenacity polymers (e.g. PET, PE, PP, ABS, PVC, Styrene, EVA) in at least one structurally supportive layer and the same or other thermoplastic or thermoset polymer in the thin inner layer including the antimicrobial agents.

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-56-9, ABS polymer 24937-78-8, EVA polymer 25038-59-9, PET polymer, biological studies

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E. Arnold 10/825,930
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02/06/2006

(antimicrobial and antifungal fluid conduits and methods of manufacture thereof) 9002-88-4 USPATFULL RN Ethene, homopolymer (9CI) (CA INDEX NAME) CN CM 1 CRN 74-85-1 CMF C2 H4  $H_2C \longrightarrow CH_2$ 9003-07-0 USPATFULL RN1-Propene, homopolymer (9CI) (CA INDEX NAME) CNCM 1 CRN 115-07-1 CMF C3 H6  $_{\rm H_3C-CH-CH_2}$ 9003-56-9 USPATFULL RN2-Propenenitrile, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA CNINDEX NAME) CM1 CRN 107-13-1 CMF C3 H3 N  $H_2C = CH - C = N$ CM2 CRN 106-99-0 CMF C4 H6  $H_2C = CH - CH = CH_2$ CM 3 CRN 100-42-5 C8 H8 CMF

 $H_2C = CH - Ph$ 

RN 24937-78-8 USPATFULL

Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME) CN

CM

CRN 108-05-4 CMF C4 H6 O2

ACO-CH-CH<sub>2</sub>

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

RN 25038-59-9 USPATFULL

Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX CN NAME)

L171 ANSWER\_22\_OF\_103\_USPATFULL of STN

ACCESSION NUMBER: 2005:178280 USPATFULL

TITLE: Antimicrobial solid surface materials containing

chitosan-metal complexes

INVENTOR(S): Sabesan, Subramaniam, Wilmington, DE, UNITED STATES

NUMBER KIND -----US 2005154361 A1 20050714 A1 20041130 PATENT INFORMATION:

US 2004-999672 APPLICATION INFO.: 20041130 (10)

Continuation-in-part of Ser. No. US 2002-324803, filed RELATED APPLN. INFO.:

on 20 Dec 2002, PENDING

DATE NUMBER \_\_\_\_\_\_

US 2001-343321P 20011221 (60) PRIORITY INFORMATION:

Utility ` DOCUMENT TYPE:

FILE SEGMENT: APPLICATION

E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT LEGAL REPRESENTATIVE:

RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417

LANCASTER PIKE, WILMINGTON, DE, 19805, US

NUMBER OF CLAIMS: 30

```
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS:
                         15 Drawing Page(s)
LINE COUNT:
                         1103
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A solid surface material with an antimicrobial agent in a thermoset
       and/or thermoplastic resin matrix where the antimicrobial agent
       comprises a chitosan-metal complex.
   9002-88-4, Polyethylene 9003-07-0, Polypropylene
      9003-53-6, Polystyrene 9003-56-9, ABS polymer
        (antimicrobial solid surface materials containing or treated with
        chitosan-metal complexes)
     9002-88-4 USPATFULL
RN
     Ethene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 74-85-1
     CMF C2 H4
H_2C \longrightarrow CH_2
     9003-07-0 USPATFULL
RN
     1-Propene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 115-07-1
     CMF C3 H6
_{\rm H_3C-CH-CH_2}
     9003-53-6 USPATFULL
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN 100-42-5
     CMF
          C8 H8
H_2C \longrightarrow CH - Ph
     9003-56-9 USPATFULL
     2-Propenenitrile, polymer with 1,3-butadiene and ethenylbenzene (9CI)
       INDEX NAME)
     CM
          1
     CRN 107-13-1
     CMF C3 H3 N
H_2C = CH - C = N
```

CM 2

CRN 106-99-0 CMF C4 H6

 $H_2C = CH - CH = CH_2$ 

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

25038-59-9, PET polymer, processes

(nonwoven fabric, containing wood pulp; antimicrobial solid surface materials containing or treated with chitosan-metal complexes)

25038-59-9 USPATFULL RN

Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX CNNAME)

L171 ANSWER 23 OF 103 USPATFULL On STN

ACCESSION NUMBER:

TITLE:

INVENTOR (S):

PATENT ASSIGNEE(S):

2005:157892 USPATFULL

Hollow anti-microbial fibers and fibrous products Foss, Stephen W., Rye Beach, NH, UNITED STATES Foss Manufacturing Co., Inc., Hampton, NH, UNITED

STATES (U.S. corporation)

NUMBER	KIND	DATE
US 2005136100	A1	20050623

PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.:

US 2004-989961 A1 20041116 (10)

Continuation-in-part of Ser. No. US 2004-762920, filed on 22 Jan 2004, PENDING Division of Ser. No. US

2000-565138, filed on 5 May 2000, GRANTED, Pat. No. US

6723428 Continuation-in-part of Ser. No. US 2000-565138, filed on 5 May 2000, GRANTED, Pat. No. US

6723428

NUMBER DATE

```
19990527 (60)
PRIORITY INFORMATION:
                        US 1999-136261P
                                                                     <---
                        US 1999-173207P
                                            19991227 (60)
                                                                     <--
                        US 1999-172285P
US 1999-172533P
US 2000-180536P
                                            19991217 (60)
                                                                     <--
                                            19991217 (60)
                                                                     <--
                                            20000207 (60)
                                                                     <--
                        US 2000-181251P
                                            20000209 (60)
                                                                     <--
                        US 2000-180240P
                                            20000204 (60)
                                                                     <--
DOCUMENT TYPE:
                        Utility
                        APPLICATION
FILE SEGMENT:
LEGAL REPRESENTATIVE:
                        PERKINS, SMITH & COHEN LLP, ONE BEACON STREET, 30TH
                        FLOOR, BOSTON, MA, 02108, US
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS:
                        13 Drawing Page(s)
                        1633
LINE COUNT:
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Anti-microbial and/or anti-fungal synthetic hollow fiber (2) and various
       products made partially or wholly therefrom are formed in pure hollow or
       mock-hollow shapes and composed of various thermoplastic polymers having
       dispersed therein organic or inorganic, antimicrobial additives. The
       thickness of the fiber walls are optimally equal to or slightly less
       than the average maximum dimensions of the anti-microbial additive
       particles. Thus, a portion of the additive particles will be present at
       outer and/or inner surfaces of the fiber walls, effectively imparting
       antimicrobial characteristics to the hollow fiber and any fibrous
       products made therefrom. The additives can be selectively dispersed in
       certain regions of the fibers in order to reduce the amount of the
       additives required, and are resistant to separation from the fiber wall,
       prolonging the fiber's antimicrobial effectiveness. Additional additives
       can be dispersed in the fiber wall with the antimicrobial agents in
       order to enhance or provide different fiber properties.
   9002-88-4, Polyethylene
        (antimicrobial particle-containing hollow fiber products)
     9002-88-4 USPATFULL
RN
     Ethene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
```

L171 ANSWER 24 OF 103 USPATFULL; on STN

ACCESSION NUMBER: TITLE:

2005:150855 USPATFULL Antimicrobial composition

INVENTOR(S):

Bringley, Joseph F., Rochester, NY, UNITED STATES Lerat, Yannick J. F., Chalon-Sur-Saone, FRANCE Liebert, Nancy B., Rochester, NY, UNITED STATES Wien, Richard W., Pittsford, NY, UNITED STATES Patton, David L., Webster, NY, UNITED STATES

Eastman Kodak Company (U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER KIND DATE

PATENT INFORMATION:

\_\_\_\_\_\_\_ US 2005129766 --- A1 20050616

APPLICATION INFO .:--

US\_2003=737455 \_ \_ A1 20031216 (10);7

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

Paul A. Leipold, Patent Legal Staff, Eastman Kodak

Company, 343 State Street, Rochester, NY, 14650-2201,

33

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

LINE COUNT:

532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to an antimicrobial composition comprising an AB antimicrobial compound and a polyethylene-polyvinylalcohol copolymer. It further relates to a medium having antimicrobial properties comprising a support and a layer comprising an antimicrobial composition comprising an antimicrobial compound and a polyethylene-polyvinylalcohol copolymer.

9002-88-4, Polyethylene 9003-07-0 IT

(antimicrobial compns. comprising polyethylene-polyvinyl alc.

copolymer)

RN9002-88-4 USPATFULL

Ethene, homopolymer (9CI) (CA INDEX NAME) CN

CM

CRN 74-85-1

CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

9003-07-0 USPATFULL RN

1-Propene, homopolymer (9CI) (CA INDEX NAME) CN

CM

CRN 115-07-1 CMF C3 H6

 $_{\rm H_3C}-_{\rm CH}=_{\rm CH_2}$ 

L171 ANSWER 25 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2005:150831 USPATFULL

TITLE: Antimicrobial article with diffusion control layer INVENTOR(S): Bringley, Joseph F., Rochester, NY, UNITED STATES

Lerat, Yannick J., Chalon Sur Saone, FRANCE Liebert, Nancy B., Rochester, NY, UNITED STATES Patton, David L., Webster, NY, UNITED STATES Wien, Richard W., Pittsford, NY, UNITED STATES

PATENT ASSIGNEE(S): Eastman Kodak Company (U.S. corporation)

PATENT INFORMATION: US 2005129742 A1 20050616
APPLICATION INFO.: US 2003-736974 A1 20031216 (10)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Paul A. Leipold, Patent Legal Staff, Eastman Kodak

Company, 343 State Street, Rochester, NY, 14650-2201,

US

NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
LINE COUNT: 705

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to an article comprising on the surface thereof an antimicrobial layer comprising a binder and an antimicrobial compound, wherein said antimicorbial compound or an antimicrobial moiety thereof, is released into the surrounding environment; and a diffusion layer; wherein the antimicrobial layer is between the surface of the article and the diffusion layer and wherein the diffusion layer changes the rate at which the antimicrobial compound is released from the antimicrobial layer into the surrounding environment.

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene

9003-53-6, Polystyrene 25038-59-9, biological studies

(diffusion layer; antimicrobial article with polymeric diffusion control layer)

RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1 CMF C3 H6

 $_{\rm H_3C}-_{\rm CH}=_{\rm CH_2}$ 

9003-53-6 USPATFULL RN

Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME) CN

CM

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

25038-59-9 USPATFULL RN

Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX CN NAME)

L171 ANSWER 26 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2005:10544 USPATFULL

Medical devices having antimicrobial coatings thereon TITLE:

INVENTOR(S): Qiu, Yongxing, Duluth, GA, UNITED STATES

Winterton, Lynn Cook, Alpharetta, GA, UNITED STATES Lally, John Martin, Lilburn, GA, UNITED STATES

Kotov, Nicholas, Stillwater, OK, UNITED STATES

	NUMBER	KIND	DATE		
PATENT INFORMATION: APPLICATION INFO.:	US 2005008676 US 2003-732648	A1 A1	20050113 20031210	(10)	<

NUMBER DATE 

PRIORITY\_INFORMATION: US 2002-435003P 20021219 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

CIBA VISION CORPORATION, PATENT DEPARTMENT, 11460 JOHNS LEGAL REPRESENTATIVE:

CREEK PARKWAY, DULUTH, GA, 30097-1556

NUMBER OF CLAIMS: 45 EXEMPLARY CLAIM: 1 LINE COUNT: 2159 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a medical device, preferably a contact lens, which a core material and an antimicrobial metal-containing LbL coating that is not covalently attached to the medical device and can impart to the medical device an increased hydrophilicity. The antimicrobial metal-containing coating on a contact lens of the invention has a high antimicrobial efficacy against microorganisms including Gram-positive and Gram-negative bacterial and a low toxicity, while maintaining the desired bulk properties such as oxygen permeability and ion permeability of lens material. Such lenses are useful as extended-wear contact lenses. In addition, the invention provides a method for making a medical device, preferably a contact lens, having an antimicrobial metal-containing LbL coating thereon.

9003-53-6, Polystyrene IT

(method for making medical devices having antimicrobial coatings)

9003-53-6 USPATFULL RN

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM

CRN 100-42-5 CMF C8 H8

PATENT INFORMATION:

 $H_2C = CH - Ph$ 

L171 ANSWER 27 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2005:3916 USPATFULL

TITLE: Ionic plasma deposition of anti-microbial surfaces and

the anti-microbial surfaces resulting therefrom

Petersen, John H., Longmont, CO, UNITED STATES INVENTOR(S):

> NUMBER KIND DATE -----20050106

US 2005003019 A1 US 2003-741015 A1 APPLICATION INFO.: 20031218 (10)

> NUMBER DATE -----

PRIORITY INFORMATION: US 2002~434784P 20021218 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

MCANDREWS HELD & MALLOY, LTD, 500 WEST MADISON STREET, LEGAL REPRESENTATIVE:

SUITE 3400, CHICAGO, IL, 60661

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 464

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A process for depositing anti-microbial materials into or onto the surface of a substrate using ionic plasma deposition. The process includes the steps of providing a cathode of target material having anti-microbial potential which is disposed within a partial vacuum, powering the cathode to generate a plasma discharge for ionizing the target material into a plasma of constituent particles. The plasma particles are reacted with ionized gas, and are selected, controlled and directed toward the substrate by electromagnetic fields generated by at least one first anode adjacent to the cathode and at least one second

anode positioned adjacent the first anode. Additional anode structures and charged screens provide further control of the plasma constituents. The plasma constituents, comprising the anti-microbial materials, are deposited on the substrate as dispersed ordered structures which form an anti-microbial surface into and onto the substrate.

IT 9003-07-0, Polypropylene

(mesh; ionic plasma deposition of antimicrobial materials on surfaces)

9003-07-0 USPATFULL RN

1-Propene, homopolymer (9CI) (CA INDEX NAME) CN

CM

CRN 115-07-1 CMF C3 H6

 $_{\rm H_3C}-_{\rm CH}=_{\rm CH_2}$ 

L171 ANSWER 28 OF 103 USPATFULL OF STN

2004:334312 USPATFULL ACCESSION NUMBER:

Delivery vehicle for silver ions TITLE:

Neuwirth, Robert S., Englewood, NJ, UNITED STATES INVENTOR(S):

DATE NUMBER KIND \_\_\_\_\_\_ US 2004265390 A1 20041230 PATENT INFORMATION: A1 20040416 (10)

US 2004-825930 APPLICATION INFO.:

NUMBER DATE \_\_\_\_\_

US 2003-463255P 20030416 (60) PRIORITY INFORMATION: <--

Utility DOCUMENT TYPE:

APPLICATION FILE SEGMENT:

OLSON & HIERL, LTD., 36th Floor, 20 North Wacker Drive, LEGAL REPRESENTATIVE:

Chicago, IL, 60606

NUMBER OF CLAIMS: 36 EXEMPLARY CLAIM:

5 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 559

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A delivery vehicle for a silver ion source such as silver nitrate and the like, suitable for use in the treatment of menorrhagia, comprises a plurality of physiologically inert beads bearing a tissue cauterizing amount of a silver ion source. Preferably the beads are made of a physiologically inert polymer, ceramic or stainless steel. The silver ion source preferably is silver nitrate and can be substantially pure silver nitrate, or can comprise silver nitrate in combination with a physiologically tolerable binder or a diluent. Suitable binders include physiologically tolerable synthetic polymeric binders, polysaccharide binders, and the like. Diluents can include other salt materials such as potassium nitrate. The beads are useful in treating menorrhagia of a mammalian uterus. The beads can be delivered to the uterus via a catheter, and are distributed throughout the uterine cavity by uterine massage or like expedient. Silver ions are delivered to the endometrium and cause necrosis of the endometrial tissue. The silver ions remaining within the uterine cavity can then be neutralized with a sodium chloride solution delivered to the uterus e.g., by catheter, and the beads

```
recovered from the uterus.
   9002-88-4, Polyethylene 9003-07-0, Polypropylene
      9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-
      butadiene-styrene copolymer 24937-78-8, EVA 25038-59-9
      , PET, biological studies
        (beads; delivery vehicle for silver ions)
RN
     9002-88-4 USPATFULL
CN
     Ethene, homopolymer (9CI) (CA INDEX NAME)
     CM
          1
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
     9003-07-0 USPATFULL
RN
     1-Propene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 115-07-1
     CMF C3 H6
H_3C-CH=CH_2
     9003-53-6 USPATFULL
RN
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN
         100-42-5
     CMF C8 H8
H_2C = CH - Ph
     9003-56-9 USPATFULL
RN
     2-Propenenitrile, polymer with 1,3-butadiene and ethenylbenzene (9CI)
CN
       INDEX NAME)
     CM
          1
     CRN 107-13-1
     CMF C3 H3 N
H_2C = CH - C = N
     CM
          2
     CRN 106-99-0
     CMF C4 H6
```

 $H_2C = CH - CH = CH_2$ 

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

24937-78-8 USPATFULL RN

Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME) CN

CM

CRN 108-05-4 CMF C4 H6 O2

 $Aco-CH=CH_2$ 

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

25038-59-9 USPATFULL RN

Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX CN NAME)

L171 ANSWER 29 OF 103 USPATFULL on STN

ACCESSION NUMBER:

2004:246735 USPATFULL

TITLE: INVENTOR(S): Compositions and methods of metal-containing materials

Burrell, Robert E., Alberta, CANADA

Wright, John B., San Antonio, TX, UNITED STATES

Lam, Kan, San Antonio, TX, UNITED STATES

Yin, Hua Qing, Alberta, CANADA Naylor, Antony G., Ontario, CANADA Moxham, Peter H., Alberta, CANADA Gillis, Scott H., Concord, MA, UNITED STATES Schechter, Paul, Dover, MA, UNITED STATES Robert Stiles, James Alexander, Toronto, CANADA

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: US 2004191329 A1 20040930 US 2003-690715 A1 20031022 (10) Continuation-in-part of Ser. No. US 2000-628735, filed on 27 Jul 2000, ABANDONED Continuation-in-part of Ser. No. US 2001-916757, filed on 27 Jul 2001, GRANTED, Pat. No. US 6692773 Continuation-in-part of Ser. No. US 2001-840637, filed on 23 Apr 2001, PENDING Continuation-in-part of Ser. No. US 2002-128208, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-131509, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-131511, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-131568, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-159587, filed on 30 May 2002, PENDING Continuation-in-part of Ser. No. US 2002-277673, filed on 22 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2002-277356, filed on 22 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2002-277298, filed on 22 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2002-277362, filed on 22 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2002-277358, filed on 22 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2002-277320, filed on 22 Oct 2002, PENDING

NUMBER DATE

PRIORITY INFORMATION:

US 2001-285884P 20010423 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA,

02110 33

NUMBER OF CLAIMS:

1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

5 Drawing Page(s)

LINE COUNT: 3855

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods of metal-containing materials of metal-containing materials are disclosed. The metal-containing material can be, for example, an antimicrobial material, an anti-biofilm material, an antibacterial material, an anti-inflammatory material, an anti-fungal material, an anti-viral material, an anti-cancer material, a pro-apoptosis material, anti-proliferative, MMP modulating material, an atomically disordered, crystalline material, and/or a nanocrystalline material. In certain embodiments, the metal-containing material is an atomically disordered, nanocrystalline silver-containing material.

IT 9002-88-4, Polyethylene

(high-d., fibers; compns. of metal-containing materials and their therapeutic uses)

RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

<--

CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

INVENTOR (S):

L171 ANSWER 30 OF 103 USPATFULL on STN ACCESSION NUMBER: 2004:220933 USPATFULL

TITLE:

Antibacterial glass composition and antibacterial

polymer composition using the same Numaquchi, Minoru, Nagoya-Shi, JAPAN

Nomura, Makio, Nagoya-Shi, JAPAN

ISHIZUKA GARASU KABUSHIKI KAISHA (non-U.S. corporation) PATENT ASSIGNEE(S):

KIND NUMBER DATE -**---** ----------US 2004170700 A1 PATENT INFORMATION: 20040902 20050906

US 6939820 B2 US 2003-721365 A1 20031126 (10) APPLICATION INFO.:

> NUMBER DATE -----

20030228 JP 2003-54716 PRIORITY INFORMATION: <--

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

Law Office of Townsend & Banta, Suite 900, South LEGAL REPRESENTATIVE:

Building, 601 Pennsylvania Avenue, N.W., Washington,

DC, 20004

NUMBER OF CLAIMS: 6 EXEMPLARY CLAIM: 1 LINE COUNT: 379

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides an antibacterial glass composition exhibiting high antibacterial performance with sufficiently sustaining antibacterial performance by adding a small amount of the antibacterial component, and an antibacterial polymer composition using the antibacterial glass composition. The present invention provides an antibacterial glass composition containing 0.1 to 5.0% by weight of Ag.sub.20 in a glass composition containing 30 to 60 mol % of P.sub.20.sub.5, 1 to 15 mol % of one or more compounds selected from the group consisting of K.sub.20, Na.sub.20 and Li.sub.20, 35 to 55 mol % of one or more compounds selected from the group consisting of MgO, CaO and ZnO, and 0.01 to 3 mol % of one or more compounds selected from the group consisting of La.sub.20.sub.3 and Y.sub.20.sub.3.

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene

9003-56-9, ABS

(glass-filled; silver-containing antibacterial phosphate glass compns. as filler for antibacterial polymer composites)

9002-88-4 USPATFULL RN

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

> CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C \stackrel{\longleftarrow}{=} CH_2$ 

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1 CMF C3 H6

 $_{\rm H_3C-CH}$   $_{\rm CH_2}$ 

RN 9003-56-9 USPATFULL

CM 1

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$ 

CM 2

CRN 106-99-0 CMF C4 H6

 $H_2C = CH - CH = CH_2$ 

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

L171 ANSWER 31 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2004:133036 USPATFULL TITLE: Microbial control system

INVENTOR(S): Kepner, Bryan E., Atlanta, GA, UNITED STATES
Ponder, Sherman M., Norcross, GA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2004101572 A1 20040527

```
US 2003-383168
                                          A1
                                               20030305 (10) <--
APPLICATION INFO.:
                              NUMBER DATE
                       ------
PRIORITY INFORMATION: 15US 2002 361997P 20020306 (60)
                       Utility
DOCUMENT TYPE:
                       APPLICATION
FILE SEGMENT:
                       John A. Parrish, Law Offices of John A. Parrish, Suite
LEGAL REPRESENTATIVE:
                       300, Two Bala Plaza, Bala Cynwyd, PA, 19004
                       39
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
                       1
NUMBER OF DRAWINGS:
                       6 Drawing Page(s)
LINE COUNT:
                       815
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Te invention relates to a microbial control system for treating influent
       water and sump water for control of microbial material in machines which
      process water such as ice making machines, humidifiers such as cool mist
      humidifiers and cooling towers. The microbial control system includes
       antimicrobial treatment media housed in a containment vessel. The
       treatment media can include any one or more of transition metals and
       transition metal oxides. The transition metal may be any of Sc, Ti, V,
       Cr, Mn, Fe, Co, Ni, Cu, Zn, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, Hf,
       Ta, W, Re, Os, Ir, Pt, Au, Hg, Rf, Db, Sg, Bh, Hs, Mt, Uun, Uuu and Uub.
  9002-88-4, Polyethylene 9003-07-0, Polypropylene
      9003-53-6, Polystyrene 25038-59-9, Polyethylene
      terephthalate, uses
        (support; microbial control system for treating influent water and sump
        water)
     9002-88-4 USPATFULL
RN
     Ethene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
RN
     9003-07-0 USPATFULL
    1-Propene, homopolymer (9CI) (CA INDEX NAME)
    CM
    CRN 115-07-1
     CMF C3 H6
_{\rm H_3C}-_{\rm CH}=_{\rm CH_2}
RN
     9003-53-6 USPATFULL
CN
    Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
```

CRN 100-42-5 CMF C8 H8  $H_2C \longrightarrow CH - Ph$ 

RN 25038-59-9 USPATFULL

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

L171 ANSWER 32 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2004:12709 USPATFULL

TITLE: Thermoplastic particles which comprise an antiviral or

antimicrobial agent

INVENTOR(S): Yao, Li, Peachtree City, GA, UNITED STATES

PATENT ASSIGNEE(S): Porex Corporation (U.S. corporation)

APPLICATION INFO.: US 2003-408095 A1 20030408 (10) <--

RELATED APPLN. INFO.: Division of Ser. No. US 2000-519595, filed on 6 Mar

2000, GRANTED, Pat. No. US 6551608

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: PENNIE & EDMONDS LLP, 1667 K STREET NW, SUITE 1000,

WASHINGTON, DC, 20006

NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
LINE COUNT: 1076

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to novel porous materials that possess antiviral and/or antimicrobial properties. The invention encompasses a porous material having antiviral or antimicrobial properties-which is comprised of a porous substrate and an antiviral or antimicrobial agent. The invention also encompasses a process for making porous materials that possess antiviral and/or antimicrobial properties and the products of the process.

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene 24937-78-8, Ethylene-vinyl acetate copolymer

(porous plastic media with antiviral or antimicrobial properties)

RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1 CMF C2 H4

```
H_2C = CH_2
```

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1 CMF C3 H6

 $_{\rm H_3C^-CH^{==}CH_2}$ 

RN 24937-78-8 USPATFULL

CN Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4 CMF C4 H6 O2

AcO-CH  $CH_2$ 

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

L171 ANSWER-3-3-OF-103-USPATFULL-on-STN

ACCESSION NUMBER:

2004:7131 USPATFULL

TITLE: INVENTOR(S):

Antimicrobial and immunostimulating composition Klein, Barbara K., North Oaks, MN, UNITED STATES

Katzner, Leo D., Shakopee, MN, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2004005364 A1 20040108

APPLICATION INFO.: US 2003-4607.60 A1 20030612 (10) - <--

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-538655, filed

on 30 Mar 2000, ABANDONED

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

FAEGRE & BENSON LLP, 2200 WELLS FARGO CENTER, 90 SOUTH

7TH STREET, MINNEAPOLIS, MN, 55402

NUMBER OF CLAIMS:

58

EXEMPLARY CLAIM:

1 Drawing Page(s)

NUMBER OF DRAWINGS: LINE COUNT:

879

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A medical composition comprising an antimicrobially effective and immunostimulating amount of a combination of a  $\beta$ -glucan component and a silver-containing component is disclosed. The medical composition may be adapted for use topically or incorporated with a mesh material which may be further adapted for use as a wound dressing or as a surgical mesh. Methods for manufacturing the medical compositions described herein are also provided. The invention further provides methods for treating tissue damaged by wound or burn, and methods for treating or repairing tissue at a surgical site.

IT 9003-07-0, Polypropylene 25038-59-9, Polyethylene

terephthalate, biological studies

(as mesh material; composition of  $\beta$ -glucan and silver-containing component and use as antimicrobial and immunostimulating agent in wound healing)

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1 CMF C3 H6

 $H_3C-CH=CH_2$ 

RN 25038-59-9 USPATFULL

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

L171 ANSWER 34 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2003:306089 USPATFULL

TITLE: Thermoplastic articles exhibiting high

surface-available silver

INVENTOR(S): Laridon, Erik, Heverlee, BELGIUM

Haas, Geoffrey, Spartanburg, SC, UNITED STATES Dankel, Robert, Taylors, SC, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2003215521 A1 20031120 <-APPLICATION INFO.: US 2003-454348 A1 20030604 (10) <-RELATED APPLN. INFO.: Division of Ser. No. US 2001-15872, filed on 12 Dec

2001, PENDING

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Wiliam S. Parks, P.O. Box 1927, Spartanburg, SC, 29304

NUMBER OF CLAIMS: 4

EXEMPLARY CLAIM: 1
LINE COUNT: 597

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Improvements in increasing the amount of surface-available silver in thermoplastic articles comprising certain silver-containing antimicrobial agents. Such an invention requires the incorporation of a sufficient amount of a carboxylic acid salt within the thermoplastic article simultaneously with the necessary silver-containing antimicrobial agent. Certain carboxylic acid salts are standard acid scavengers and lubricants for certain thermoplastic applications; however, the amounts required within this inventive thermoplastic article are in excess of that commonly added within such articles, and the types of acid scavengers possibly added within such target thermoplastic articles are preferably neutralized hydrotalcite compounds, thereby permitting the carboxylic acid salt to function in the inventive manner. Surprisingly, such a high amount of such standard salts, as well as potentially other non-standard salts, present within the target thermoplastic cause the release of greater amounts of silver to the target article's surface, thereby permitting a greater degree of antimicrobial activity, among other potential benefits for such an increase in surface-available silver. Methods of producing such inventive thermoplastics are also encompassed within this invention.

IT 9002-88-4

(DOW 8454N, Dowlex 2552E; thermoplastic articles exhibiting high surface-available silver)

RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM I

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

IT 9003-07-0

(Himont Profax 6301 NT; thermoplastic articles exhibiting high surface-available silver)

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1 CMF C3 H6

 $_{\rm H_3C}-_{\rm CH}=_{\rm CH_2}$ 

L171 ANSWER 35 OF 103 USPATFULL on STN

ACCESSION NUMBER:

2003:288251 USPATFULL

TITLE:

Metal ion modified high surface area materials for odor

removal and control

INVENTOR(S):

MacDonald, John Gavin, Decatur, GA, UNITED STATES

NUMBER

KIND DATE

US 2003203009 A1 20031030 US 2002-137052 A1 20020430 (10) PATENT INFORMATION: <---APPLICATION INFO.: <--

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

PAULEY PETERSEN KINNE & ERICKSON, 2800 WEST HIGGINS LEGAL REPRESENTATIVE:

ROAD, SUITE 365, HOFFMAN ESTATES, IL, 60195

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Page(s)

LINE COUNT: 823

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to high surface area materials, such as nanoparticles, that are coated with metal ions. These modified nanoparticles have active sites that bind various gases and/or odorous compounds, thereby removing these compounds from a medium such as air or water. Metal ions are adsorbed onto the surface of the nanoparticle and bound strongly to the surface. By selection of the metal ion, specific gaseous compounds and/or odorous compounds can be targeted and removed efficiently and effectively from both aqueous phase and from the air. The modified nanoparticles are useful in numerous article of manufacture for industrial and consumer use.

9003-53-6, Polystyrene

(nanoparticle material; metal ion modified high surface area materials for odor removal and control)

9003-53-6 USPATFULL RN

Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME) CN

CM 1

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

L171 ANSWER 36 OF 103 USPATFULL on STN

2003:257329 USPATFULL ACCESSION NUMBER:

Solutions and aerosols of metal-containing compounds TITLE:

Burrell, Robert E., Alberta, CANADA INVENTOR (S):

Gillis, Scott H., Concord, MA, UNITED STATES Schechter, Paul, Dover, MA, UNITED STATES Wright, John B., San Antonio, TX, UNITED STATES

Lam, Kan, San Antonio, TX, UNITED STATES

Yin, Hua Qing, Alberta, CANADA Naylor, Antony G., Alberta, CANADA Moxham, Peter H., Alberta, CANADA

KIND DATE NUMBER \_\_\_\_\_\_

US 2003180379 A1 US 2002-277673 A1 PATENT INFORMATION: 20030925 20021022 (10) APPLICATION INFO.: RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-628735, filed

on 27 Jul 2000, ABANDONED Continuation-in-part of Ser. No. US 2001-916757, filed on 27 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-840637, filed on 23 Apr 2001, PENDING Continuation-in-part of Ser. No. US 2002-128208, filed on 23 Apr 2002, PENDING

Continuation-in-part of Ser. No. US 2002-131509, filed on 23 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-131511, filed on 23 Apr 2002, PENDING

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA,

02110

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

77 1

NUMBER OF DRAWINGS:

9 Drawing Page(s)

LINE COUNT:

3353

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Solutions and aerosols of metal-containing compounds are disclosed. Methods of preparing and using the solutions and aerosols, particularly in the treatment of a subject having a condition, are also disclosed. The metal-containing material can be, for example, an antimicrobial material, an antibacterial material, an anti-inflammatory material, an anti-fungal material, an anti-viral material, an anti-cancer material, a pro-apoptosis material, and/or an MMP modulating material. In certain embodiments, the metal-containing material is an atomically disordered, silver-containing material.

9002-88-4, Polyethylene

(high-d., dressing; preparation of aerosols and solns. of metal-containing compds. for therapeutic uses)

9002-88-4 USPATFULL RN

Ethene, homopolymer (9CI) (CA INDEX NAME) CN

> CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$ 

L171/ ANSWER 37 OF 103 USPATFULL on STN

ACCESSION NUMBER:

2003:172814 USPATFULL

TITLE:

High aspect ratio encapsulated inorganic antimicrobial

additive for controlled release

INVENTOR(S):

Trogolo, Jeffrey A., Boston, MA, UNITED STATES Rossitto, Frank C., Danvers, MA, UNITED STATES Welch, Edward K., II, Ipswich, MA, UNITED STATES

NUMBER KIND DATE

\_\_\_\_\_\_ PATENT INFORMATION: \_\_\_\_US\_2003118658..... A1 - 20030626 ---

APPLICATION\_INFO.: US\_2001=32370 A1 20011221 (10)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

AGION TECHNOLOGIES, 60 Audubon Road, Wakefield, MA,

01880

NUMBER OF CLAIMS:

46

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

2 Drawing Page(s)

LINE COUNT: 927

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ The invention relates to a high aspect ratio microcapsule comprising an inorganic antimicrobial agent coated with a hydrophilic polymer. The

hydrophilic polymer is able to absorb sufficient water as to enable the action of the encapsulated antimicrobial agent. These high aspect ratio

microcapsules are useful to impart antimicrobial activity and can be used in polymer compositions, sprays and coatings. A method of preparing the high aspect ratio microcapsule by melt compounding and fabrication of the antimicrobial agent with the hydrophilic polymer is provided. Polymer compositions comprising the high aspect ratio microcapsules and a matrix polymer are also provided. Another embodiment of the invention is an article prepared from the polymer compositions comprising the high aspect ratio microcapsules and a matrix polymer. IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-53-6, Polystyrene 9003-56-9, ABS (high aspect ratio encapsulated inorg. antimicrobial additive for controlled release) 9002-88-4 USPATFULL RN Ethene, homopolymer (9CI) (CA INDEX NAME) CN CMCRN 74-85-1 CMF C2 H4  $H_2C = CH_2$ 9003-07-0 USPATFULL RN 1-Propene, homopolymer (9CI) (CA INDEX NAME) CNCM 1 CRN 115-07-1 CMF C3 H6  $H_3C-CH=CH_2$ 9003-53-6 USPATFULL RN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME) CN CM CRN 100-42-5 CMF C8 H8  $H_2C \longrightarrow CH - Ph$ 9003-56-9 USPATFULL RN 2-Propenenitrile, polymer with 1,3-butadiene and ethenylbenzene (9CI) CNINDEX NAME) CM 1 CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$ 

CM 2

CRN 106-99-0 CMF C4 H6

 $H_2C \longrightarrow CH - CH \longrightarrow CH_2$ 

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$ 

L171 ANSWER 38 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2003:119648 USPATFULL

TITLE: Dendrimer biocide-silver nanocomposites: their

preparation and applications as potent antimicrobials

INVENTOR(S): Cooper, Stuart L., Chicago, IL, UNITED STATES

Chen, Chris Z., Trooper, PA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2003082133 A1 20030501

PATENT INFORMATION: US 2003082133 A1 20030501 <-APPLICATION INFO.: US 2002-309628 A1 20021204 (10) <--

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-877931, filed on 8 Jun

2001, PENDING

NUMBER DATE

PRIORITY\_INFORMATION: US 2000-210888P 20000609 (60) <--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: CONNOLLY BOVE LODGE & HUTZ LLP, 1220 Market Street,

Post Office Box 2207, Wilmington, DE, 19899-2207

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 462

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel cationic dendrimer biocide-silver nanocomposite and methods for its use as a biocide. The biocidal nanocomposites of the present invention are effective against a variety of microbial species, including anthrax. The invention is also highly stable and safe for exposure to human skin. The invention has applications as an antibiological warfare agents, antimicrobial agent for surface coatings and as a general biocide that is safe for human exposure.

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene.

9003-53-6, Polystyrene

(preparation of dendrimer biocide-silver nanocomposites as potent

antimicrobials)
RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

RN 9003-07-0 USPATFULL

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1 CMF C3 H6

 $H_3C-CH=CH_2$ 

RN 9003-53-6 USPATFULL

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

L171 ANSWER 39 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2003:29911 USPATFULL

TITLE: Method of induction of apoptosis and inhibition of matrix metalloproteinases using antimicrobial metals

INVENTOR(S): Burrell, Robert Edward, Sherwood Park, CANADA

Wright, John Barrymore, San Antonio, TX, UNITED STATES

Lam, Kan, San Antonio, TX, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2003021854 A1 20030130 <-APPLICATION INFO.: US 2002-131568 A1 20020423 (10) <--

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-840637, filed

on 23 Apr 2001, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2001-285884P 20010423 (60) <-

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN

CIRCLE, SUITE 201, BOULDER, CO, 80303

NUMBER OF CLAIMS: 34 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 2021

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to a method to induce apoptosis and to inhibit matrix metalloproteinases in a disease condition in a human or animal by contacting hyperplastic tissue, tumor tissue, or a cancerous lesion with one or more antimicrobial metals, preferably formed with atomic disorder, and preferably in a nanocrystalline form. The nanocrystalline antimicrobial metal of choice may be used in the form of a nanocrystalline coating of one or more antimicrobial metals, a nanocrystalline powder of one or more antimicrobial metals, or a solution containing dissolved species from a nanocrystalline powder or coating of one or more antimicrobial metals.

IT 9002-88-4, Polyethylene

(high d.; induction of apoptosis and inhibition of matrix metalloproteinases using antimicrobial metals)

RN 9002-88-4 USPATFULL

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$ 

L171 ANSWER 40 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2000:160608 USPATFULL

TITLE: Use of locally delivered metal ions for treatment of

periodontal disease

INVENTOR(S): Roberts, F. Donald, Dover, MA, United States

Friden, Phillip M., Bedford, MA, United States Spacciapoli, Peter, Newbury, MA, United States

Nelson, Eric, Waltham, MA, United States

PATENT ASSIGNEE(S): Periodontix, Inc., Watertown, MA, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6153210 20001128 <-APPLICATION INFO: US 1997-911413 19970814 (8) <--

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rose, Shep K.
LEGAL REPRESENTATIVE: Clark & Elbing LLP

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 690

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Periodontal disease can be treated by the administration of metal ions, preferably silver ions, to the site where the microorganisms that cause this disease reside. Administration can be to periodontal pockets or adjacent to exposed tooth roots or alveolar bone during periodontal surgical procedures. The metal ions can be administered in polymeric

## E. Arnold 10/825,930

microparticles, deformable films or microparticles embedded within deformable films. The metal ions are

particularly microbiocidal to the bacterial pathogens that are

the causative agents of periodontal disease.

9003-53-6, Polystyrene 25038-59-9, Poly(ethylene

terephthalate), biological studies

(metal ions, locally delivered, for treatment of periodontal disease)

RN 9003-53-6 USPATFULL

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

RN 25038-59-9 USPATFULL

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

L171 ANSWER 41 OF 103 USPATFULL on STN

ACCESSION NUMBER: 2000:124570 USPATFULL

TITLE: Thermoplastic resin composition INVENTOR(S): Kuratsuji, Takatoshi, Kyoto, Japan

Maillet, Jerome, Kyoto, Japan Miyaki, Yoshiyuki, Kyoto, Japan

PATENT ASSIGNEE(S): Elf Atochem S.A., France (non-U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_ PATENT INFORMATION: US 6120790 20000919 19971127 WO 9744387 US 1998-46 19980513 APPLICATION INFO.: (9) WO 1997-EP2602 19970516 19980513 PCT 371 date 19980513 PCT 102(e) date

NUMBER DATE

PRIORITY INFORMATION: JP 1996-124381 19960520 <--

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Harrison, Robert H.

LEGAL REPRESENTATIVE: Smith Gambrell & Russell, LLP

NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 252

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Purpose: the purpose of the present invention is to offer resin compositions which have antimicrobial/fungistatic properties which show outstanding dispersion and outstandingly durable performance.

Constitution: thermoplastic resin compositions characterized in that an antimicrobial/fungistatic agent, and particularly an inorganic antimicrobial/fungistatic agent, is compounded with a copolymer containing a polyether chain as a constituent unit, such as a polyether/polyamide copolymer, a polyether/polyester copolymer or a polyether urethane, for example, at 0.05-20 weight %, and thermoplastic resin compositions which comprise a thermoplastic resin, an antimicrobial/fungistatic agent and a copolymer having a polyether chain as a constituent unit.

IT 9003-56-9, Toyolac Parel TP 10

(thermoplastic polyether resin composition with lasting antibacterial and antifungal properties)

RN 9003-56-9 USPATFULL

CN 2-Propenenitrile, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$ 

CM 2

CRN 106-99-0 CMF C4 H6

H2C== CH- CH== CH2

CM 3

CRN 100-42-5 CMF C8 H8

 $_{\rm H_2C}$  CH- Ph

L171 ANSWER 42 OF 103 USPATFULL on STN ACCESSION NUMBER: 96:60154 USPATFULL

ACCÉSSION NUMBER: TITLE:

Apparatus for removal of excess hydrogen ions from

humans

INVENTOR(S):

Halperin, Mitchell L., North York, Canada

Cheema-Dhadli, Surinder, Mississauga, Canada

PATENT ASSIGNEE(S): Rossmark Medical Publishers Inc., Ontario, Canada

## E. Arnold 10/825,930

(non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5533964 19960709 <-APPLICATION INFO.: US 1994-197949 19940217 (8) <--

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Prebilic, Paul B.

LEGAL REPRESENTATIVE: Riches, McKenzie & Herbert

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 588

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound or composition incorporating silver carbonate is disclosed for use in removing excess hydrogen ions in a patient. The silver carbonate reacts with chloride ions which naturally occur in the patient's body fluids to produce a silver chloride precipitate. The chemical reaction producing silver chloride causes the release of hydroxyl, carbonate and/or bicarbonate ions which react with free hydrogen ions to form carbon dioxide and water. The silver carbonate compound or composition may be provided in a blood filtration cartridge, syringe or an orally ingestible form surrounded by a selectively permeable membrane. The membrane is selected to permit movement of ions, as well as carbon dioxide and water molecules therethrough, while preventing the silver carbonate or silver chloride precipitate from being released into the patient.

IT 9003-53-6D, Polystyrene, conjugates with anion exchange resins
(composition and apparatus for removal of excess hydrogen ions from humans)
RN 9003-53-6 USPATFULL

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

L171 ANSWER 43 OF 103 USPATFULL on STN ACCESSION NUMBER: 92:18793 USPATFULL

TITLE: Method for producing an antibacterial molded article of

polyolefin resin composition comprising a zeolite containing silver and subjecting the surface of the

molded article to corona discharge

INVENTOR(S): Yazaki, Takao, Mie, Japan

Noro, Masataka, Mie, Japan Matsui, Takashi, Mie, Japan

PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Tokyo, Japan

(non-U.S. corporation)

## E. Arnold 10/825,930

NUMBER DATE ------JP 1989-273476 19891020 / PRIORITY INFORMATION: <--DOCUMENT TYPE: Utility FILE SEGMENT: Granted Page, Thurman K. PRIMARY EXAMINER: PRIMARY EXAMINER: Page, Inurman K.
ASSISTANT EXAMINER: Webman, Edward J. LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 487 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A method for producing an antibacterial molded article of polyolefin resin is described, comprising molding a polyolefin resin composition having compounded therewith 0.01% by weight or more, based on the polyolefin resin composition, of an antibacterial agent which is a zeolite containing silver to form a molded article of a desired shape, and thereafter subjecting the antibacterial surface of the molded article to a corona discharge treatment. 24937-78-8, Ethylene-vinyl acetate copolymer (stretch packaging multilayer films, with good self-adhesion and transparency) 24937-78-8 USPATFULL RN Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME) CN CM 1 CRN 108-05-4 CMF C4 H6 O2  $Aco-CH=CH_2$ CM 2 CRN 74-85-1 CMF C2 H4  $H_2C \longrightarrow CH_2$ L171 ANSWER 44 OF 103 USPATFULL on STN ACCESSION NUMBER: 89:36495 USPATFULL TITLE: Infrared reflecting composition for topical application to the skin INVENTOR(S): Weber, Paul, Miami, FL, United States Hevia, Oscar, Miami, FL, United States University of Miami, Coral Gables, FL, United States PATENT ASSIGNEE(S): (U.S. corporation) NUMBER KIND DATE -----PATENT INFORMATION: US 4828825 19890509 APPLICATION INFO.: US 1986-907508 19860915 (6) DOCUMENT TYPE: Utility US 4828825 <--

Granted

FILE SEGMENT:

PRIMARY EXAMINER: Ore, Dale R.

LEGAL REPRESENTATIVE: Cushman, Darby & Cushman

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 345

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is disclosed an infrared reflecting composition for topical application to the skin of a warm blooded animal comprising fine particles of an epidermally suitable substrate coated with at least one layer comprising an infrared reflecting amount of an infrared reflecting material. Also disclosed are methods of protecting the skin against infrared radiation by employing said composition or an infrared reflecting material alone.

IT 25038-59-9, Poly(ethylene terephthalate), biological studies

(substrate, for IR-reflecting particles for application to skin)

RN 25038-59-9 USPATFULL

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

L171 ANSWER 45 OF 103 USPAT2 on STN

ACCESSION NUMBER: 2002:198319 USPAT2

TITLE: Mixtures of phenolic and inorganic materials with

antimicrobial activity

INVENTOR(S): Herbst, Heinz, Loerrach, GERMANY, FEDERAL REPUBLIC OF

Stadler, Urs, Madison, NJ, United States

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, Tarrytown, NY,

United States (U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2000-234433P 20000921 (60) <--

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Page, Thurman K.
ASSISTANT EXAMINER: Fubara, Blessing
LEGAL REPRESENTATIVE: Stevenson, Tyler A.

NUMBER OF CLAIMS: 8 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 1031

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

**`**.

02/06/2006

```
Plastic films, fibers and articles are provided long-term antimicrobial
AB
       activity with a combination of certain phenolic and inorganic
       antimicrobial agents. The plastic films, fibers and articles with
       antimicrobial activity exhibit superior resistance to discoloration, may
       be processed at high temperature, and maintain physical properties upon
       weathering, especially upon exposure to ultraviolet radiation.
   9002-88-4, Polyethylene 9003-07-0, Polypropylene
      9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-
      butadiene-styrene polymer 25038-59-9, Polyethylene
      terephthalate, uses
        (plastics containing microbicidal phenols and inorg. materials)
RN
     9002-88-4 USPAT2
     Ethene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
         74-85-1
     CRN
     CMF C2 H4
H_2C \longrightarrow CH_2
     9003-07-0 USPAT2
RN
     1-Propene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN
         115-07-1
     CMF C3 H6
H_3C-CH=CH_2
RN
     9003-53-6 USPAT2
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN
         100-42-5
     CMF C8 H8
H_2C = CH - Ph
RN
     9003-56-9 USPAT2
     2-Propenenitrile, polymer with 1,3-butadiene and ethenylbenzene (9CI)
CN
       INDEX NAME)
     CM
          1
     CRN 107-13-1
     CMF
         C3 H3 N
H_2C = CH - C = N
```

CM 2

CRN 106-99-0 CMF C4 H6

 $H_2C = CH - CH = CH_2$ 

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

RN 25038-59-9 USPAT2

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

=> d ibib ed ab hitind 46-103
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE,
EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' - CONTINUE? (Y)/N:y

L171 ANSWER 46 OF 103 MEDLINE on STN DUPLICATE 8

ACCESSION NUMBER: 2002725824 MEDLINE DOCUMENT NUMBER: PubMed ID: 12487587

TITLE: Synthesis of silver nanodisks using polystyrene mesospheres as templates.

AUTHOR: Hao Encai; Kelly K Lance; Hupp Joseph T; Schatz George C CORPORATE SOURCE: Department of Chemistry, Northwestern University, 2145

Sheridan Road, Evanston, Illinois 60208, USA.

SOURCE: Journal of the American Chemical Society, (2002 Dec

**25)** 124 (51) 15182-3.

Journal code: 7503056. ISSN: 0002-7863.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: NONMEDLINE; PUBMED-NOT-MEDLINE

ENTRY MONTH: 200303

Entered STN: 20021219 ENTRY DATE:

> Last Updated on STN: 20030311 Entered Medline: 20030310

Entered STN: 20021219 ED

Last Updated on STN: 20030311 Entered Medline: 20030310

DUPLICATE 10

ACCESSION NUMBER: 2002356626 MEDLIN MEDLINE PubMed ID: 12099807 DOCUMENT NUMBER:

Adsorption of polyethyleneimine on silver TITLE:

nanoparticles and its interaction with a plasmid DNA: a surface-enhanced Raman scattering study. Sanchez-Cortes S; Berenguel R Marsal; Madejon A;

AUTHOR: Perez-Mendez M

CORPORATE SOURCE: Instituto de Estructura de la Materia, CSIC, Serrano, 121,

> 28006 Madrid, Spain imts158@iem.cfmac.csic.es Biomacromolecules, (2002 Jul-Aug) 3 (4) 655-60.

Journal code: 100892849. ISSN: 1525-7797.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

SOURCE:

Priority Journals FILE SEGMENT:

200308 ENTRY MONTH:

Entered STN: 20020709 ENTRY DATE:

> Last Updated on STN: 20021212 Entered Medline: 20030826

EDEntered STN: 20020709

> Last Updated on STN: 20021212 Entered Medline: 20030826

Raman spectroscopy is applied in this work to study the adsorption of AB poly(ethyleneimine) (PEI) on Aq nanoparticles obtained by reduction with citrate, as well as to the study of the interaction between PEI and a plasmid. The surface-enhanced Raman spectroscopy (SERS) affords important information about the interaction and orientation of the polymer on the particles. In particular we have found that this polymer interacts with the surface through their amino groups in an interaction which also involves a change in the protonation state of amino groups as well as an increase of the chain order. This interaction implies a charge-transfer effect as deduced from the strong resonant effect in Raman spectra obtained at different excitation wavelengths. complex formed by PEI and a plasmid, obtained by encoding the HBV (hepatitis B virus) genome inside the EcoRI restriction site of pGEM vector, was also studied by SERS. The interaction between both polymers leads to a conformational change affecting both macromolecules that can be detected by Raman at different excitation wavelengths. PEI undergoes a change to a more disordered structure as well as an increase of the number of protonated amino groups. The plasmid undergoes a structural change from A-DNA structure to B-DNA, along with a change in the superhelicity resulting in a more lineal structure when the plasmid interacts with PEI.

CTAdsorption

> Base Composition Electrostatics Genetic Vectors Molecular Conformation Nanotechnology

Nucleic Acid Conformation

Particle Size

\*Plasmids: CH, chemistry

\*Polyethyleneimine: CH, chemistry

E. Arnold 10/825,930

Research Support, Non-U.S. Gov't

Silver: CH, chemistry Spectrum Analysis, Raman

Transfection

7440-22-4 (Silver); 9002-98-6 (Polyethyleneimine) RN

0 (Genetic Vectors): 0 (Plasmids) CN

L171 ANSWER 48 OF 103 MEDLINE on STN DUPLICATE 11

2002374858 ACCESSION NUMBER: MEDLINE PubMed ID: 12120069 DOCUMENT NUMBER:

TITLE: Fabrication of compact silver nanoshells on polystyrene spheres through electrostatic

attraction.

Dong A G; Wang Y J; Tang Y; Ren N; Yang W L; Gao Z AUTHOR:

CORPORATE SOURCE: Department of Chemistry, Fudan University, Shanghai 200433,

P. R. China.

Chemical communications (Cambridge, England), (2002 SOURCE:

Feb 21) (4) 350-1.

Journal code: 9610838. ISSN: 1359-7345.

PUB. COUNTRY: England: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

FILE SEGMENT: NONMEDLINE; PUBMED-NOT-MEDLINE

ENTRY MONTH: 200208

ENTRY DATE: Entered STN: 20020718

Last Updated on STN: 20020809 Entered Medline: 20020808

ED Entered STN: 20020718

> Last Updated on STN: 20020809 Entered Medline: 20020808

Nanoshells composed of close-packed silver nanocrystals have AB

been fabricated on polystyrene spheres via direct

electrostatic attraction at appropriate pH; the thickness and roughness of the shell can be readily controlled through a layer-by-layer technique.

L171 ANSWER 49 OF 103 MEDLINE on STN DUPLICATE 12

ACCESSION NUMBER: 2001134011 MEDITAR DOCUMENT NUMBER: PubMed ID: 11205496

Disposable, stable media for reproducible surface-enhanced TITLE:

> Raman spectroscopy. Bell S E; Spence S J

School of Chemistry, The Queen's University of Belfast, CORPORATE SOURCE:

Belfast, UK BT9 5AG.. s.bell@qub.ac.uk

Analyst, (2001 Jan) 126 (1) 1-3. SOURCE:

Journal code: 0372652. ISSN: 0003-2654.

England: United Kingdom PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

NONMEDLINE; PUBMED-NOT-MEDLINE FILE SEGMENT:

ENTRY MONTH: 200103

AUTHOR:

ENTRY DATE: Entered STN: 20010404

Last Updated on STN: 20010404 Entered Medline: 20010301

Entered STN: 20010404 ED

> Last Updated on STN: 20010404 Entered Medline: 20010301

Large numbers of identical and stable SE(R)RS [surface-enhanced AB (resonance) Raman] -active media, which are convenient to handle and manipulate but sufficiently inexpensive that they can be used once and

then discarded, have been prepared by isolating nanoparticles

from Aq and Au sols in hydrophilic polymer gels. The preparation simply involves mixing a suitable polymer with the sol to give a viscous suspension that can be coated onto a substrate and dried to form a hard translucent film. The films remain inactive until they are treated with aqueous analyte solution, which causes the film to swell and brings the analyte into contact with the active metal particles. The swollen films give strong SERS spectra which are effectively identical to those obtained from simple sols. The advantage of this method is that the dried polymers can be stored indefinitely before use and that they give a high degree of spectral reproducibility.

L171 ANSWER 50 OF 103 **DUPLICATE 13** 

MEDLINE on STN 2001082231 MEDLIN MEDLINE ACCESSION NUMBER: PubMed ID: 11084615 DOCUMENT NUMBER:

Immunophenotyping using gold or silver TITLE:

nanoparticle-polystyrene bead

conjugates with multiple light scatter.

Siiman O; Gordon K; Burshteyn A; Maples J A; Whitesell J K AUTHOR:

CORPORATE SOURCE: Advanced Technology, Beckman Coulter, Miami, Florida

33196-2500, USA.. olavi.siiman@coulter.com

Cytometry: journal of the Society for Analytical Cytology, SOURCE:

(2000 Dec 1) &1 (4) 298-307. Journal code: 8102328. ISSN: 0196-4763.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200101

ENTRY DATE: Entered STN: 20010322

> Last Updated on STN: 20010322 Entered Medline: 20010108

ED Entered STN: 20010322

Last Updated on STN: 20010322 Entered Medline: 20010108

BACKGROUND: The type of antibody-conjugated polystyrene (PS) latex beads ΔR for use as light scatter shift agents for targeted lymphocyte populations in whole blood has been expanded to include gold and silver

nanoparticle-aminodextran-PS latex bead

conjugates with antibodies. The linkers between antibody and colloidal metal were an aminotrithiol ligand or aminodextran polymer molecules. METHODS: A modified flow instrument, including forward light scatter (FS), side light scatter (SS), light scatter at other intermediate angle ranges, LMALS (10-20 degrees ) and UMALS (20-65 degrees ) was used for simultaneous bead probe measurements. A conventional flow cytometer was used in simultaneous bead-fluorescent marker experiments. RESULTS: Two mutually exclusive cell populations, CD4+ and CD8+ lymphocytes, have been simultaneously enumerated in blood by using a mixture of CD4-PS, CD8-Au-PS or CD4-Au-PS, CD8-PS beads, and one laser line, 633 nm, excitation. Similar measurements were made with mixtures of CD4-PS, CD8-Ag-PS or CD4-Ag-PS, CD8-PS beads. Also, simultaneous use of bead and fluorescent markers mixed with whole blood was demonstrated with CD4-PS beads and with the CD4-RD1/CD8-FITC dual marker. CONCLUSIONS: Enumeration of CD4 and CD8 lymphocytes in whole blood by light scatter parameters only compared well with standard analyses with fluorescent markers. In simultaneous bead-fluorescent marker labeling of lymphocytes, the labeled bead had to be mixed first with cells in whole blood.

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CTAntibodies, Monoclonal

Antigens, CD4: AN, analysis

Antigens, CD8: AN, analysis CD4-Positive T-Lymphocytes: IM, immunology CD8-Positive T-Lymphocytes: IM, immunology Colloids \*Flow Cytometry: MT, methods Fluorescein-5-isothiocyanate \*Gold: ME, metabolism Humans \*Immunophenotyping: MT, methods Lasers Leukocyte Count \*Lymphocyte Subsets: IM, immunology Microspheres \*Polystyrenes: ME, metabolism Scattering, Radiation \*Silver: ME, metabolism 3326-32-7 (Fluorescein-5-isothiocyanate); 7440-22-4 (Silver); RN7440-57-5 (Gold); 9003-53-6 (styrofoam) 0 (Antibodies, Monoclonal); 0 (Antigens, CD4); 0 (Antigens, CD8); 0 CN (Colloids); 0 (Polystyrenes) MEDLINE on STN **DUPLICATE 15** L171 ANSWER 51 OF 103 93329043 MEDLINE ACCESSION NUMBER: DOCUMENT NUMBER: PubMed ID: 8335892 Induction of HIV-specific cytotoxic T lymphocytes in vivo TITLE: with hybrid HIV-1 V3:Ty-virus-like particles. Layton G T; Harris S J; Gearing A J; Hill-Perkins M; Cole J AUTHOR: S; Griffiths J C; Burns N R; Kingsman A J; Adams S E British Bio-technology Ltd., Cowley, Oxford, U.K. CORPORATE SOURCE: Journal of immunology (Baltimore, Md. : 1950), (1993 SOURCE: Jul 15) 151 (2) 1097-107. Journal code: 2985117R. ISSN: 0022-1767. United States PUB. COUNTRY: Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE: LANGUAGE: English Abridged Index Medicus Journals; Priority Journals; AIDS FILE SEGMENT: ENTRY MONTH: 199308 Entered STN: 19930903 ENTRY DATE: Last Updated on STN: 19970203 Entered Medline: 19930825 ED Entered STN: 19930903 Last Updated on STN: 19970203 Entered Medline: 19930825 In general, it has proven difficult to induce CTL responses using simple AB proteins or peptides without resorting to specialized adjuvants. study we show that particulate polymeric Ag in the form of hybrid Ty virus-like particles carrying the V3 region of HIV-1 qp120/160 envelope protein (V3:Ty-VLP) induce V3-specific CTL in BALB/c mice in the absence of adjuvant or lipid vehicle. In vitro restimulation of splenocytes with V3 peptide was necessary in order to generate effector CTL. Th cell activation was not required for this in vitro restimulation phase. The CTL induced by the V3:Ty-VLP were CD8+ve, H-2d-restricted, and HIV-1 isolate-specific (IIIB or MN). Co-administration of IIIB V3:Ty-VLP and MN V3:Ty-VLP primed both IIIB and MN V3-specific CTL. However, only IIIB V3-specific CTL were primed by

hybrid Ty-VLP carrying IIIB, MN, and RF V3 loop sequences on the same

competition between CTL epitopes. In direct comparisons, V3:Ty-VLP were substantially more potent than rgp120. Rgp160 and a 40mer IIIB V3 peptide

particle indicating that there is intra- but not intermolecular

both failed to prime V3-specific CTL. These data suggest that the

particulate nature of hybrid Ty-VLP facilitates uptake into APC
with subsequent access to the MHC class I processing pathway and that they
may be useful vaccine vehicles for inducing cytolytic immunity against
HIV-1 and other intracellular pathogens.

CT Check Tags: Female
Amino Acid Sequence

Animals

Antigens, CD8: AN, analysis H-2 Antigens: PH, physiology

\*HIV Envelope Protein gp120: IM, immunology

\*HIV-1: IM, immunology

Mice

**AUTHOR:** 

Mice, Inbred BALB C Mice, Inbred C57BL Molecular Sequence Data

\*Peptide Fragments: IM, immunology

\*Recombinant Fusion Proteins: IM, immunology \*T-Lymphocytes, Cytotoxic: IM, immunology

CN 0 (Antigens, CD8); 0 (H-2 Antigens); 0 (HIV Envelope Protein gp120); 0
 (HIV envelope protein gp120 (305-321)); 0 (Peptide Fragments); 0
 (Recombinant Fusion Proteins)

L171 ANSWER 52 OF 103 MEDLINE ON STN DUPLICATE 16

ACCESSION NUMBER: 76239425 MEDLINE DOCUMENT NUMBER: PubMed ID: 939924

TITLE: Dane particle-associated DNA polymerase

and e antigen: relation to chronic hepatitis among carriers

of hepatitis B surface antigen. Nordenfelt E; Andren-Sandberg M

SOURCE: Journal of infectious diseases, (1976 Jul) 134

(1) 85-9.

Journal code: 0413675. ISSN: 0022-1899.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 197609

ENTRY DATE: Entered STN: 19900313

Last Updated on STN: 19900313 Entered Medline: 19760925

ED Entered STN: 19900313

Last Updated on STN: 19900313 Entered Medline: 19760925

Thirty-nine carriers of hepatitis B surface antigen (HBs Ag) were studied AB with respect to e antigen and Dane particle-associated DNA polymerase activity and their relation to chronic hepatitis. Most of these individuals were followed for four or five years. A strong correlation between e antiqen and DNA polymerase activity was found. the 22 e antiqen-positive patients, 21 showed polymerase activity; none of the 13 e antigen-negative patients (one of whom had antibody to e antigen) had such activity. Three of four patients who became e antigen-negative after being e antigen-positive showed loss of polymerase activity. An independent clinical evaluation showed a strong correlation between chronic hepatitis and positive reactions in the tests for e antigen and DNA polymerase. The results emphasize the possibility of differentiating between groups of chronic carriers of HBs Ag by testing for e antigen and Dane particle-associated DNA polymerase activity. The differentiation may have important clinical implications.

CT Check Tags: Male

Antigens, Viral: AN, analysis

Carrier State

\*DNA Nucleotidyltransferases: ME, metabolism

Hepatitis B: EN, enzymology
\*Hepatitis B: IM, immunology

Hepatitis B Antigens

Humans

CN 0 (Antigens, Viral); 0 (Hepatitis B Antigens); EC 2.7.7.- (DNA Nucleotidyltransferases)

L171 ANSWER 53 OF 103 MEDLINE ON STN ACCESSION NUMBER: 2003578217 MEDLINE DOCUMENT NUMBER: PubMed ID: 14658147

TITLE: Studies of the optical properties of metal-pliable polymer

composite materials.

AUTHOR: Giesfeldt Kathleen S; Connatser R Maggie; De Jesus Marco A;

Lavrik Nickolay V; Dutta Pampa; Sepaniak Michael J

CORPORATE SOURCE: Department of Chemistry, University of Tennessee,

Knoxville, Tennessee 37996-1600, USA.

SOURCE: Applied spectroscopy, (2003 Nov) 57 (11) 1346-52.

Journal code: 0372406. ISSN: 0003-7028.

PUB. COUNTRY: United States

DOCUMENT TYPE: (EVALUATION STUDIES)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200408

ENTRY DATE: Entered STN: 20031216

Last Updated on STN: 20040810 Entered Medline: 20040809

ED Entered STN: 20031216

Last Updated on STN: 20040810 Entered Medline: 20040809

Polymer-nano-metallic-particle composites have AB demonstrated technological potential due to their unique optical and electrical properties. Herein, we report on composites prepared via physical vapor deposition of silver metal onto pliable poly(dimethylsiloxane) (PDMS) polymer. Rapid Ag diffusion and nano-metallic-particle formation in a phase-separated surface layer of the PDMS creates unique sub-surface-based composites whose properties vary based on rate of deposition and average Ag thickness. Additionally, nanometallic-particle spacing can be altered with fair reproducibility and reversibility by physically manipulating the Aq-PDMS composite. The optical properties of the materials are studied by visible wavelength optical extinction spectrometry and surface-enhanced Raman scattering (SERS), including studies performed during physical manipulation. Direct current (DC) conductivity measurements were made during Ag deposition to study percolation conditions for the materials. Depth-profiling was performed by X-ray photoelectron spectrometry. Sample Raman spectral data collected with the composite as a SERS substrate are included. A practical technological characteristic of these composite materials arises from their potential to be molded into functional devices.

CT Check Tags: Comparative Study

Coated Materials, Biocompatible: AN, analysis Coated Materials, Biocompatible: CH, chemistry Elasticity

\*Electric Conductivity

\*Manufactured Materials: AN, analysis

Materials Testing

\*Nanotechnology: IS, instrumentation

Nanotechnology: MT, methods Nanotubes: AN, analysis \*Nanotubes: CH, chemistry

Optics

Photometry: IS, instrumentation

\*Photometry: MT, methods Polymers: AN, analysis \*Polymers: CH, chemistry

Research Support, U.S. Gov't, Non-P.H.S.

\*Silver: CH, chemistry

\*Spectrum Analysis, Raman: MT, methods \*Surface Plasmon Resonance: MT, methods

Surface Properties RN 7440-22-4 (Silver)

CN 0 (Coated Materials, Biocompatible); 0 (Polymers)

L171 ANSWER 54 OF 103 MEDLINE ON STN
ACCESSION NUMBER: 2002644157 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12403424

DOCUMENT NUMBER: TITLE:

Dimensionally stable sensors for a continuous monitoring

program to detect subterranean termite (Isoptera:

Rhinotermitidae) activity.

AUTHOR:

Su Nan-Yao

CORPORATE SOURCE:

Ft. Lauderdale Research and Education Center, University of

Florida, Institute of Food and Agricultural Sciences,

33314, USA.. nysu@ufl.edu

SOURCE:

Journal of economic entomology, (2002 Oct) 95 (5)

975-80.

Journal code: 2985127R. ISSN: 0022-0493.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200212

ENTRY DATE:

Entered STN: 20021030

Last Updated on STN: 20021218 Entered Medline: 20021217

ED Entered STN: 20021030

Last Updated on STN: 20021218 Entered Medline: 20021217

AB A dimensionally stable sensor composed of a closed-cell

polyethylene sheet on which a silver particle circuit was painted and sandwiched between two spruce stakes was tested for use in a monitoring program to detect subterranean termites. Sensors were connected to a datalogger for continuous monitoring of sensor circuit breakages over 12 mo, and were manually inspected monthly to assess sensor performance. The mean monthly sensor accuracy for three field test sites was 98.7%, with most false responses caused by early timing of the monthly inspection when termites entered the station before damaging the sensor circuits. Mean sensor longevity (the time for a sensor circuit to break in the absence of termites) of the dimensionally stable sensors was 11.7 mo; a substantial improvement over the 4.4-mo longevity recorded

previously for wooden sensors.

CT Animals

\*Insect Control: MT, methods

\*Isoptera

Research Support, Non-U.S. Gov't

L171 ANSWER 55 OF 103 MEDLINE on STN ACCESSION NUMBER: 2003378428 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12914025

TITLE: Poly(p-hydroxystyrene) grafted polystyrene

nanospheres: excellent hosts for silver

and ruthenium nanoparticles.

AUTHOR: Greci M T; Pathak S; Mercado K; Prakash G K; Thompson M E;

Olah G A

CORPORATE SOURCE: Loker Hydrocarbon Research Institute, Department of

Chemistry, University of Southern California, Los Angeles,

California 90089-1661, USA.

SOURCE: Journal of nanoscience and nanotechnology, (2001

Mar) 1 (1) 3-6.

Journal code: 101088195. ISSN: 1533-4880.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200309

ENTRY DATE: Entered STN: 20030814

Last Updated on STN: 20030917 Entered Medline: 20030916

ED Entered STN: 20030814

Last Updated on STN: 20030917 Entered Medline: 20030916

A novel approach is described for the preparation of surface AB functionalized micro- and nanobeads using one pot synthesis by a core-shell method. Monodisperse poly(p-hydroxystyrene) is successfully prepared by grafting the p-acetoxystyrene monomer during the last 30 min of the fabrication of polystyrene bead core by emulsifier-free emulsion polymerization followed by hydrolysis of the acetoxy group by a base. The size of the resulting beads is dictated mostly by the size of the core. Hydroxyl derivatized polystyrene microspheres have been found useful as a high surface area and stable support for anchoring catalytically active silver and ruthenium nanoparticles. The bead formation, surface functionalization, and coating with metal nanoparticles have been studied using scanning electron microscopy, transmission electron microscopy, energy dispersive x-ray spectrometry, Fourier transform infrared spectrometry, and Auger analysis.

CT Catalysis
\*Coated Materials, Biocompatible: CS, chemical synthesis

Colloids: CS, chemical synthesis

Macromolecular Substances

Materials Testing

Microscopy, Electron

Microscopy, Electron, Scanning

Microspheres

Molecular Conformation

\*Nanotechnology: MT, methods

Particle Size

Polymers: CH, chemistry

Polystyrenes: CS, chemical synthesis

\*Polystyrenes: CH, chemistry Research Support, Non-U.S. Gov't

Research Support, U.S. Gov't, Non-P.H.S.

\*Ruthenium: CH, chemistry
\*Silver: CH, chemistry

Surface Properties

RN 72317-19-2 (hydroxystyrene-styrene); 7440-18-8 (Ruthenium); 7440-22-4

(Silver)

CN 0 (Coated Materials, Biocompatible); 0 (Colloids); 0 (Macromolecular

Substances); 0 (Polymers); 0 (Polystyrenes)

MEDLINE on STN L171 ANSWER 56 OF 103 2000481300 MEDLINE ACCESSION NUMBER: PubMed ID: 10878944 DOCUMENT NUMBER:

[Diagnostic value of Diamed AG latex gel kit for detection TITLE:

of diphtheria toxin].

Opredelenie diagnosticheskoi tsennosti lateksnogo gelevogo

diagnostikuma firmy "Diamed AG" dlia vyiavleniia

difteriinogo toksina.

Ivanova V V; Kvetnaia A S; Skripchenko N V; Zhelezova L I; AUTHOR:

Schwind P; Tsygan S; Shavva S A

Klinicheskaia laboratornaia diagnostika, (2000 Apr) SOURCE:

(4) 42-4.

Journal code: 9432021. ISSN: 0869-2084.

PUB. COUNTRY: RUSSIA: Russian Federation

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: Russian

Priority Journals FILE SEGMENT:

ENTRY MONTH: 200010

Entered STN: 20001019 ENTRY DATE:

> Last Updated on STN: 20001019 Entered Medline: 20001012

Entered STN: 20001019 ED

> Last Updated on STN: 20001019 Entered Medline: 20001012

ID-PaGIA diphtheria toxin polymer particle diagnostic AB agent manufactured by DiaMed AG, Switzerland, was tried at bacteriological laboratory of Institute of Childhood Infections in St. Petersburg. The trials were carried out using two methods, direct and capture, which differ by the duration of incubation of the studied C. diphtheriae cultures. Ouchterloney's immunoprecipitation test in agar was the control method. Ninety-seven toxigenic strains were tested by direct test and 76 by capture test; in addition, 19 nontoxigenic strains were tested. The results coincided with control tests in 100% cases. The advantages of each method are defined and the possibility of their utilization at bacteriological laboratories of infectious hospitals and State Sanitary and Epidemiological Surveillance is evaluated.

Check Tags: Comparative Study \*Diphtheria Toxin: AN, analysis English Abstract

Humans

\*Latex Fixation Tests: ST, standards

CN 0 (Diphtheria Toxin)

L171 ANSWER 57 OF 103 MEDLINE on STN ACCESSION NUMBER: -- 2000009165 MEDLINE PubMed ID: 10542020 DOCUMENT NUMBER:

E. coli expressed proteins as diagnostic reagents for TITLE:

typing of foot-and-mouth disease virus.

Suryanarayana V V; Viswanathan S; Ratish G; Bist P; AUTHOR:

Prabhudas K; Gajendragad M R; Natarajan C

CORPORATE SOURCE: Protein and Nucleic Acid Laboratory, Indian Veterinary

Research Institute, Bangalore, India.

Archives of virology, (1999) 144 (9) 1701-12. SOURCE:

Journal code: 7506870. ISSN: 0304-8608.

PUB. COUNTRY: Austria

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals ENTRY MONTH: 199911

ENTRY DATE: Entered STN: 20000111

Last Updated on STN: 20021218 Entered Medline: 19991124

ED Entered STN: 20000111

Last Updated on STN: 20021218 Entered Medline: 19991124

Truncated proteins corresponding to the C-terminal half of VP1 of four AB vaccine strains and two field variants of foot-and-mouth disease virus (FMDV) were expressed in E. coli. The expressed proteins were affinity purified and their type specific reactivity was confirmed by immunoprecipitation with anti-virus antibodies. Antibodies were raised against the purified proteins in guinea pigs and the type specificity of the anti peptide antibodies was confirmed by antigen capture reverse transcription polymerase chain reaction (Ag-RT/PCR) where the sera against a particular type captured the homologous virus. Antibodies were purified by immuno-affinity chromatography and tested for specificity by various serological tests. Using the purified proteins and the antibodies raised against them, tests like ELISA, Ag-RT/PCR, and latex agglutination test (LAT) were standardized. Application of the reagents in various tests was studied by screening a few field samples and by nucleotide sequencing. Specific reactivity of antibodies raised against expressed protein was seen with both vaccine virus and field samples. Thus E. coli expressed proteins and antibodies to them may form an alternative and cheap source of diagnostic reagents. The studies showed that antibodies against peptides were mono-specific and therefore may be used in LAT for rapid typing of FMDV and Ag-RT/PCR for typing ELISA negative field samples.

CT Animals

Antibodies, Viral: IM, immunology Antigens, Viral: IM, immunology

\*Aphthovirus: CL, classification

Aphthovirus: GE, genetics Aphthovirus: IM, immunology

\*Capsid: GE, genetics

\*Capsid: IM, immunology

Capsid Proteins

Cattle

AUTHOR:

Enzyme-Linked Immunosorbent Assay Escherichia coli: GE, genetics Escherichia coli: ME, metabolism

\*Foot-and-Mouth Disease: VI, virology

Latex Fixation Tests

Recombinant Proteins: IM, immunology Research Support, Non-U.S. Gov't

Reverse Transcriptase Polymerase Chain Reaction: MT, methods

Sequence Analysis, DNA

CN 0 (Antibodies, Viral); 0 (Antigens, Viral); 0 (Capsid Proteins); 0 (Recombinant Proteins); 0 (VP1 protein, Foot-and-mouth disease virus)

L171 ANSWER 58 OF 103 MEDLINE ON STN ACCESSION NUMBER: 87271971 MEDLINE DOCUMENT NUMBER: PubMed ID: 2440495

TITLE: Temperature-gradient gel electrophoresis. Thermodynamic

analysis of nucleic acids and proteins in purified form and

in cellular extracts.
Rosenbaum V; Riesner D

SOURCE: Biophysical chemistry, (1987 May 9) 26 (2-3)

235-46.

Journal code: 0403171. ISSN: 0301-4622.

PUB. COUNTRY:

Netherlands

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

198708

ENTRY DATE:

Entered STN: 19900305

Last Updated on STN: 19900305 Entered Medline: 19870828

ED Entered STN: 19900305

Last Updated on STN: 19900305

Entered Medline: 19870828

A temperature-gradient gel electrophoresis technique and its application AB to the study of structural transitions of nucleic acids and protein-nucleic acid complexes are described. The temperature gradient is established in a slab gel by means of a simple ancillary device for a commercial horizontal gel apparatus. The gradient may be freely selected between 10 and 80 degrees C, and is highly reproducible and linear. In a normal application the biopolymers migrate perpendicular to the temperature gradient so that every individual molecule is at constant temperature throughout electrophoresis. The structural transition of a biopolymer is seen as a continuous band which is retarded or speeded up in the temperature range of the transition. Dissociation processes are mostly irreversible under the conditions of electrophoresis and, therefore, show up as discontinuous transitions from a slow-moving to fast-moving band. As examples the conformational transitions of viroids, double-stranded RNA from reovirus, double-stranded satellite RNA from cucumber mosaic virus and repressor-operator complexes have been studied. It could be shown that by this method dsRNA molecules may be differentiated which differ only in one base-pair, or proteins differing in one amino acid only. As a particular advantage, temperature-gradient gel electrophoresis allows the study of conformational transitions of biopolymers which have not been purified. The biopolymer may either be identified by silver staining as a specific band among many others or, if the study is carried out on nucleic acids, these may be recorded by hybridization with a radioactive probe.

CT \*DNA, Bacterial

DNA, Bacterial: IP, isolation & purification Electrophoresis, Polyacrylamide Gel: MT, methods

Escherichia coli: GE, genetics

Genes, Bacterial

Nucleic Acid Hybridization

Nucleoproteins

\*Proteins

Proteins: IP, isolation & purification

\*RNA

RNA: IP, isolation & purification Research Support, Non-U.S. Gov't

Temperature Thermodynamics

Viroids: AN, analysis

RN 63231-63-0 (RNA)

CN 0 (DNA, Bacterial); 0 (Nucleoproteins); 0 (Proteins)

L171 ANSWER 59 OF 103 MEDLINE on STN ACCESSION NUMBER: 84114193 MEDLINE DOCUMENT NUMBER: PubMed ID: 6663423

TITLE:

Continuous monitoring of pH in the tissue mode: evaluation

of a miniature sensor during acidosis and tissue

hypoperfusion.

AUTHOR: Das J B; Joshi I D; Philippart A I

SOURCE: Journal of pediatric surgery, (1983 Dec) 18 (6)

914-21.

Journal code: 0052631. ISSN: 0022-3468.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198403

ENTRY DATE: Entered STN: 19900319

Last Updated on STN: 19900319 Entered Medline: 19840316

ED Entered STN: 19900319

Last Updated on STN: 19900319 Entered Medline: 19840316

AB The in vivo performance of a 20G copolymer pH sensor, needlelike in configuration, was studied in the normal dog, and dogs made acidotic by the constant infusion of lactic acid, or by the induction of tissue perfusion defects. Sensors were placed at two extravascular sites in the leg, deep subcutaneous (pHe/sc), and intramuscular in the adductor (pHe/im). This pH sensor is a silver wire capped by a H+-specific polymer; it has a built-in reference system. electrochemical characteristics and in vivo performance are similar to those of glass pH electrodes. The continuously monitored values were compared with discrete arterial blood gas analyses at 10 to 20 minute intervals. The baseline values in 15 dogs under general anesthesia were: pH/art 7.331 +/- .042, pHe/sc 7.291 +/- .076, and pHe/im 7.265 +/- .102 (mean +/- SD; n = 45 observations each). During metabolic acidosis (lactic acid infusion), the direction and rates of change were similar in pHe/sc and pHe/im. Tissue perfusion defects were induced by moderate-to-severe hemorrhage (single or repeated bleeds) or operative shock (splenectomy and exteriorization of bowel). Both pHe/sc and pHe/im fell sharply, with a more gradual drop in pH/art. In those who survived after infusion of shed blood or dextran-40, pHe recovered rapidly. In the moribund, pHe continued to deteriorate. This pH sensor is a sensitive prognosticator of acid-base changes in the tissue. The in vivo drift is small: 0.008 pH per hour. The placement of the sensor via an intracath cannula in the subcutaneous tissue of the thigh is recommended. (ABSTRACT TRUNCATED AT 250 WORDS)

CT Check Tags: Female; Male

\*Acidosis: DI, diagnosis

Animals

Dogs

Hydrogen-Ion Concentration

Lactates

Miniaturization

\*Monitoring, Physiologic: IS, instrumentation

Polymers

Research Support, Non-U.S. Gov't \*Shock, Hemorrhagic: DI, diagnosis \*Shock, Surgical: DI, diagnosis

CN 0 (Lactates); 0 (Polymers)

L171 ANSWER 60 OF 103 MEDLINE on STN ACCESSION NUMBER: 76059321 MEDLINE DOCUMENT NUMBER: PubMed ID: 1181929

TITLE: Observations on the core particle of hepatitis B

virus and the DNA polymerase associated with

hepatitis B antigen.

AUTHOR: Hirschman S Z; Gerber M; Garfinkel E

E. Arnold 10/825,930 (19.75-) SOURCE: American journal of the medical sciences, Jul-Aug) 270 (1) 141-9. Journal code: 0370506. ISSN: 0002-9629. United States PUB. COUNTRY: Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE: LANGUAGE: English Abridged Index Medicus Journals; Priority Journals FILE SEGMENT: 197601 ENTRY MONTH: ENTRY DATE: Entered STN: 19900313 Last Updated on STN: 19900313 Entered Medline: 19760108 ED Entered STN: 19900313 Last Updated on STN: 19900313 Entered Medline: 19760108 Several methods are presented for the purification of core particles of AB hepatitis B virus (HBV) from nuclei of infected human hepatocytes. No endogenous DNA polymerase activity was found in any of the preparations of core particles even when circular double and single stranded DNAs were used as exogenous templates. The DNA polymerase activity associated with serum HB Ag was not stimulated by circular DNAs. Sodium dodecyl sulfate (SDS) at concentrations of greater than or equal to 0.1% inhibited the DNA polymerase activity of serum HB Ag. Exogenous templates such as native and activated calf thymus and Micrococcus lysodeikticus DNAs did not stimulate the DNA polymerase of serum HB Ag even in the presence of low concentrations of SDS. It is suggested that the DNA polymerase associated the HB Ag is specific for its own DNA as template. CTCheck Tags: Comparative Study Animals Cell Nucleus: IM, immunology \*DNA Nucleotidyltransferases: AN, analysis DNA Nucleotidyltransferases: AI, antagonists & inhibitors DNA, Viral: AN, analysis Enzyme Induction \*Hepatitis B: IM, immunology \*Hepatitis B Antigens: AN, analysis Hepatitis B virus: AN, analysis Hepatitis B virus: EN, enzymology \*Hepatitis B virus: UL, ultrastructure Humans Liver: IM, immunology Rabbits Research Support, U.S. Gov't, P.H.S. Sodium Dodecyl Sulfate: PD, pharmacology Templates, Genetic 151-21-3 (Sodium Dodecyl Sulfate) RN0 (DNA, Viral); 0 (Hepatitis B Antigens); EC 2.7.7.- (DNA CN Nucleotidyltransferases) L171 ANSWER 61 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN 2003034235 EMBASE

ACCESSION NUMBER:

TITLE:

Facilitated transport of ethylene across polymer

membranes containing silver salt: Effect of HBF(4) on the photoreduction of silver ions.

AUTHOR:

Kim J.H.; Min B.R.; Kim H.S.; Won J.; Kang Y.S.

Y.S. Kang, Ctr. for Facilitated Transp. M., Korea Inst. of CORPORATE SOURCE:

Sci. and Technology, P.O. Box 131, Cheongryang, Seoul

130-650, Korea, Republic of. yskang@kist.re.kr

SOURCE:

Journal of Membrane Science, (15 Feb 2003) Vol. 212, No.

1-2, pp. 283-288. .

Refs: 26

ISSN: 0376-7388 CODEN: JMESDO

PUBLISHER IDENT.: S 0376-7388(02)00451-9

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

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LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20030207

Last Updated on STN: 20030207

ED Entered STN: 20030207

Last Updated on STN: 20030207

Silver salts dissolved in amide group containing polymer
such as poly(2-ethyl-2-oxazoline) (POZ) are labile to reduce to silver
metals under UV-Vis light or heat. Since the reduction of silver
ions to silver nanoparticles can change the separation
performance of facilitated olefin transport through polymer
membranes containing silver salt, it is attempted to prohibit
the reduction of silver ion. It is found that the trace of water present
in silver-polymer complex membranes participates in
the reduction reaction and H(+) ions are generated in a reversible
reaction of the reduction process. In this respect, tetrafluoroboric acid
(HBF(4)) was introduced as a proton donator to suppress the reduction of
silver ion. The effects of HBF(4) on the photoreduction derived by UV
irradiation were characterized by mixed gas transport of ethylene/ethane,
UV-Vis spectroscopy, scanning electron microscopy (SEM). .COPYRGT. 2002

CT Medical Descriptors:

\*artificial membrane

\*membrane transport

reduction

photoreactivity

ultraviolet irradiation ultraviolet spectroscopy scanning electron microscopy

nanoparticle

article

priority journal
Drug Descriptors:

\*ethylene
\*silver

\*boric acid

alkene

trace element

proton

RN (ethylene) 74-85-1; (silver) 7440-22-4; (boric acid) 10043-35-3, 11113-50-1, 11129-12-7, 14213-97-9; (proton) 12408-02-5, 12586-59-3

L171 ANSWER 62 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003059211 EMBASE

TITLE: Secondary ion and laser ablation mass spectrometry for the

quantitative characterization of styrene-butadiene

copolymers.

AUTHOR: Ruch D.; Muller J.F.; Migeon H.N.; Boes C.; Zimmer R. CORPORATE SOURCE: J.F. Muller, Lab. Spectrometr. Masse Chimie Laser,

Universite de Metz, 1 Boulevard Arago, F-57078 Metz

Technopole 2000 Cedex, France. jfmuller@lsmcl.sciences.univ-

metz.fr

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Journal of Mass Spectrometry, (A Jan 2003) Vol. 38, No. 1,
SOURCE:
                    pp. 50-57. .
                    Refs: 21
                    ISSN: 1076-5174 CODEN: JMSPFJ
                    United Kingdom
COUNTRY:
                    Journal; General Review
DOCUMENT TYPE:
                            Biophysics, Bioengineering and Medical
FILE SEGMENT:
                    027
                            Instrumentation
                    029
                            Clinical Biochemistry
LANGUAGE:
                    English
SUMMARY LANGUAGE:
                    English
ENTRY DATE:
                    Entered STN: 20040220
                    Last Updated on STN: 20040220
     Entered STN: 20040220
ED
     Last Updated on STN: 20040220
     Styrene-butadiene copolymers were analyzed by static secondary ion mass
AB
     spectrometry (S-SIMS) and laser ablation Fourier transform ion cyclotron
     resonance mass spectrometry (LA-FTICRMS) to obtain quantitative
     information based on specific ions. Silver deposition was
     performed on polystyrene, butadiene rubber and styrene-butadiene rubber.
     Under these experimental conditions, new secondary ions were detected, in
     particular silver-cationized butadiene [M(butadiene) -
     Ag](+) and styrene [M(styrene) - Ag](+) monomers. In contrast, LA-FTICRMS
     experiments did not require pretreatment. At high laser power density, UV
     photons (193, 266 and 355 nm) allowed the detection of styrene and
     butadiene monomers at m/z 104 and 54, respectively. The use of the
     observed ions by SIMS or LA-FTICRMS ensures that quantitative information
     on the relative distribution of each monomer is obtained. However, the
     silver coating thickness in the SIMS experiment seems to have an
     important influence on the quantitative information obtained. For
     LA-FTICRMS experiments, the best results are obtained at a wavelength of
     355 nm. Copyright .COPYRGT. 2003 John Wiley & Sons, Ltd.
CT
    Medical Descriptors:
     *mass spectrometry
     quantitative analysis
     Fourier transformation
     cyclotron
     intermethod comparison
     ultraviolet radiation
     material coating
     thickness
     chemical structure
     mass spectrometer
     excimer laser
     controlled study
     review
     priority journal
     Drug Descriptors:
     *styrene
     *1,3 butadiene
       *copolymer
      silver
      polystyrene
      rubber
     cation
      monomer
     (styrene) 100-42-5; (1,3 butadiene) 106-99-0; 25339-57-5; (silver
RN
     ) 7440-22-4; (polystyrene) 9003-53-6; (rubber)
     9006-04-6
```

NP

(1) Nicolet Instrument FTMS 2000

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CO
     (1) Thermoquest (United States) ; Ion-TOF (Germany) ; Lamba Physik
     (Germany)
L171 ANSWER 63 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                    2002124726 EMBASE
TITLE:
                    Experimental measurements on thermophoresis in the
                    transition region.
                    Santachiara G.; Prodi F.; Cornetti C.
AUTHOR:
                    F. Prodi, Institute ISAO-CNR, Via Gobetti 101, 40129
CORPORATE SOURCE:
                    Bologna, Italy. f.prodi@isao.bo.cnr.it
                    Journal of Aerosol Science, (2002) Vol. 33, No. 5, pp.
SOURCE:
                    769-780.
                    Refs: 36
                    ISSN: 0021-8502 CODEN: JALSB7
                    S 0021-8502(01)00211-7
PUBLISHER IDENT.:
COUNTRY:
                    United Kingdom
DOCUMENT TYPE:
                    Journal; Article
FILE SEGMENT:
                    027
                            Biophysics, Bioengineering and Medical
                            Instrumentation
                    English
LANGUAGE:
SUMMARY LANGUAGE:
                    English
                    Entered STN: 20020418
ENTRY DATE:
                    Last Updated on STN: 20020418
     Entered STN: 20020418
ED
     Last Updated on STN: 20020418
     Measurements of thermophoretic velocities of carnauba wax, polystyrene
AΒ
     latex, silver particles and sodium chloride have been performed
     by injecting the aerosol as a thin sheet into a laminar flow of clean gas,
     with a temperature gradient established across it. These measurements
     have enabled us to compare the experimental data with the known theories.
     The aerosol radius range was 0.11-0.83 µm. The measured reduced
     thermophoretic velocity was found to depend only on the Knudsen number, in
     the range 0.09-0.7, and not on the gas/particle conductivity
     ratio. .COPYRGT. 2002 Elsevier Science Ltd. All rights reserved.
     Medical Descriptors:
CT
     *aerosol
     *physical phenomena
     *thermophoresis
     measurement
     laminar airflow
     temperature dependence
     gas flow
     theory
     velocity
     conductance
     article
     priority journal
     Drug Descriptors:
     *wax
       *polystyrene
       *silver
     *sodium chloride
     (wax) 83062-05-9; (polystyrene) 9003-53-6; (silver)
RN
     7440-22-4; (sodium chloride) 7647-14-5
L171 ANSWER 64 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
                    2002304857 EMBASE
ACCESSION NUMBER:
                    Surface implantation treatments to prevent infection
TITLE:
```

complications in short term devices.

AUTHOR: Davenas J.; Thevenard P.; Philippe F.; Arnaud M.N.

CORPORATE SOURCE: J. Davenas, Laboratoire Materiaux Polymeres, Universite

Claude Bernard, 43 Bd du 11 Novembre, 69100 Villeurbanne,

France. davenas@matplast.univ-lyon1.fr

SOURCE: Biomolecular Engineering, (2002) Vol. 19, No. 2-6, pp.

263-268. . Refs: 10

ISSN: 1389-0344 CODEN: BIENFV

PUBLISHER IDENT.: S 1389-0344(02)00037-0

COUNTRY:

Netherlands

DOCUMENT TYPE:

Journal; Conference Article

FILE SEGMENT:

027 Biophysics, Bioengineering and Medical

Instrumentation
033 Orthopedic Surgery
037 Drug Literature Index

004 Microbiology

LANGUAGE: SUMMARY LANGUAGE:

English English

ENTRY DATE:

Entered STN: 20020913

Last Updated on STN: 20020913

ED Entered STN: 20020913

Last Updated on STN: 20020913

Surface treatments of short term devices are actually evaluated to reduce AB the risk of infections, which in particular are one of the main causes of complications following catheter insertion. We have investigated the efficacy of ion beam techniques to reduce bacterial adhesion-or to induce bactericidal activity of different polymer materials: PVC, silicone rubber, poly(urethane) and poly(ethylene). routes have been evaluated, based on the production of non fouling surfaces, through the production of diamond-like surfaces upon irradiation with rare gases, or the implantation of silver, known for its bactericidal action. In this contribution we discuss more specifically the treatment of poly(ethylene), where a broad range of surface characterisation techniques could show that the biological activity resulted from the formation of metallic colloidal silver near the surface of the polymer, associated to the formation of a dense surface acting as a diffusion barrier. Reduction of the implantation energy to 10 keV, led to activity enhancement resulting from the easier accessibility of surface colloids evidenced by AFM microscopy. emphasises the specific processes induced by the formation of silver nano-particles at low energy implantation, which differs basically from Ion Beam Assisted Deposition (IBAD technique) leading to the formation of a continuous silver coating (Artif. Organs 18 (1994) 266; International Patent (PCT) WO 95/18637 (1995)). Copyright .COPYRGT. 2002 Elsevier Science B.V.

CT Medical Descriptors:

\*antibacterial activity

\*implantation

\*bactericidal activity

\*bacterium adherence

\*catheter infection: PC, prevention

surface property

energy
absorption
nonhuman
controlled study
conference paper
priority journal
Drug Descriptors:

\*silver \*polymer \*polyethylene \*biomaterial

RN (silver) 7440-22-4; (polyethylene) 9002-88-4

L171 ANSWER 65 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 2002359037 EMBASE

TITLE: Improvements to the enzyme-developed radial immunodiffusion

technique.

AUTHOR: Vidal J.

CORPORATE SOURCE: J. Vidal, School of Psychology, University of Barcelona,

Passeig de la Vall d'Hebron, 171, 08035 Barcelona, Spain.

jvidal@psi.ub.es

SOURCE: Journal of Immunological Methods, (15 Dec 2002) Vol. 270,

No. 2, pp. 163-170. .

Refs: 18

ISSN: 0022-1759 CODEN: JIMMBG

PUBLISHER IDENT.: S 0022-1759(02)00300-9

COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 026 Immunology, Serology and Transplantation

029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20021024

Last Updated on STN: 20021024

ED Entered STN: 20021024

Last Updated on STN: 20021024

An enzyme-developed radial immunodiffusion technique, previously known as the diffusion-in-gel enzyme-linked immunosorbent assay (DIG-ELISA), has been improved in two ways: (a) antibody-containing spots have been made larger and more distinct by revealing them with a mixture of hydrogen peroxide, 3,3'-diaminobenzidine and nickel, and further intensification of the ensuing spots with silver; (b) the reliability of the method has been enhanced by chemically coupling the antigen to a layer of a polyamino acid (poly(lysine, phenylalanine)) adsorbed to the bottom of the polystyrene petri dish. The usefulness of the improved technique is illustrated by reference to the measurement of serum concentrations of IgM and IgG, and in the assessment of antibody levels against a particulate antigen (erythrocytes). .COPYRGT. 2002 Elsevier Science B.V. All rights reserved.

Medical Descriptors:

\*immunodiffusion

\*enzyme linked immunosorbent assay

reliability

CT

antigen antibody reaction

adsorption blood chemistry

immunoglobulin blood level

human nonhuman male female mouse

normal human animal experiment controlled study

article

```
priority journal
     Drug Descriptors:
     antibody
    hydrogen peroxide
    diaminobenzidine
     nickel
       silver
      polyaminoacid
     polylysine
     phenylalanine
      polystyrene
     immunoglobulin M: EC, endogenous compound
     immunoglobulin G: EC, endogenous compound
     (hydrogen peroxide) 7722-84-1; (diaminobenzidine) 7411-49-6, 91-95-2;
RN
     (nickel) 7440-02-0; (silver) 7440-22-4; (polylysine)
     25104-18-1, 25988-63-0, 33960-24-6, 38000-06-5, 73565-56-7;
     (phenylalanine) 3617-44-5, 63-91-2; (polystyrene) 9003-53-6;
     (immunoglobulin M) 9007-85-6; (immunoglobulin G) 97794-27-9
```

L171 ANSWER 66 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002060490 EMBASE

TITLE: Resonance light scattering particles as ultrasensitive

labels for detection of analytes in a wide range of

applications.

AUTHOR: Yguerabide J.; Yguerabide E.E.

CORPORATE SOURCE: J. Yguerabide, 11585 Sorrento Valley Road, San Diego, CA

92121, United States. jyguerabide@geniconsciences.com

SOURCE: Journal of Cellular Biochemistry, (2002) Vol. 84, No.

SUPPL. 37, pp. 71-81. .

Refs: 31

ISSN: 0730-2312 CODEN: JCEBD5

COUNTRY: United States

DOCUMENT TYPE: Journal; Conference Article

FILE SEGMENT: 005 General Pathology and Pathological Anatomy

029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20020301

Last Updated on STN: 20020301

ED Entered STN: 20020301

Last Updated on STN: 20020301

We have developed a new detection technology that uses resonance light AB scattering (RLS) particles as labels for analyte detection in a wide range of formats including immuno and DNA probe type of assays in solution, solid phase, cells, and tissues. When a suspension of nano sized gold or silver particles is illuminated with a fine beam of white light, the scattered light has a clear (not cloudy) color that depends on composition and particle size. This scattered light can be used as the signal for ultrasensitive analyte detection. The advantages of gold particles as detection labels are that (a) their light producing power is equivalent to more than 500,000 fluorescein molecules, (b) they can be detected at concentrations as low as 10(-15) M in suspension by eye and a simple illuminator, (c) they do not photobleach, (d) individual particles can be seen in a simple student microscope with dark field illumination, (e) color of scattered light can be changed by changing particle size or composition for multicolor multiplexing, and (f) they can be conjugated with antibodies, DNA probes, ligands, and protein receptors for specific analyte detection. These advantages allow for ultra-senstive analyte detection with easiness of use and simple and

## E. Arnold 10/825,930

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relatively inexpensive instrumentation. We have shown that our RLS
     technology can indeed be used for ultra-sensitive detection in a wide
     range of applications including immuno and DNA probe assays in solution
     and solid phases, detection of cell surface components and in situ
     hybridization in cells and tissues. Most of the assay formats described
     in this article can be adapted for drug fast throughput screening.
     .COPYRGT. 2002 Wiley-Liss, Inc.
CT
     Medical Descriptors:
     *light scattering
     *fluorescence analysis
     immunoassay
     DNA probe
     genotype
     in situ hybridization
     virus detection
     immunopathology
     chemical analysis
     gene expression
     image analysis
     human
     human cell
     conference paper
     priority journal
     Drug Descriptors:
     fluorescent dye
       silver
     gold
     copper
     aluminum
     selenium
       polystyrene
     protein
     \Delta M\Delta
     RNA
     (silver) 7440-22-4; (gold) 7440-57-5; (copper)
RN
     15158-11-9, 7440-50-8; (aluminum) 7429-90-5; (selenium) 7782-49-2;
     (polystyrene) 9003-53-6; (protein) 67254-75-5; (DNA) 9007-49-2;
     (RNA) 63231-63-0
L171 ANSWER 67 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
                    2002000310 EMBASE
ACCESSION NUMBER:
                    Hierarchical self-assembly of metal nanostructures on
TITLE:
                    diblock copolymer scaffolds.
AUTHOR:
                    Lopes W.A.; Jaeger H.M.
                    W.A. Lopes, James Franck Institute, Department of Physics,
CORPORATE SOURCE:
                    University of Chicago, Chicago, IL 60637, United States.
                    h-jaeger@uchicago.edu
SOURCE:
                    Nature, (13 Dec 2001) Vol. 414, No. 6865, pp. 735-738. .
                    Refs: 26
                    ISSN: 0028-0836 CODEN: NATUAS
COUNTRY:
                    United Kingdom
DOCUMENT TYPE:
                    Journal; Article
                            Biophysics, Bioengineering and Medical
FILE SEGMENT:
                    027
                            Instrumentation
LANGUAGE:
                    English
SUMMARY LANGUAGE:
                    English
ENTRY DATE:
                    Entered STN: 20020110
                    Last Updated on STN: 20020110
ED
     Entered STN: 20020110
```

```
Last Updated on STN: 20020110
     Self-assembly is emerging as an elegant, 'bottom-up' method for
AB
     fabricating nanostructured materials. This approach becomes
     particularly powerful when the ease and control offered by the
     self-assembly of organic components is combined with the electronic,
     magnetic or photonic properties of inorganic components. Here we
     demonstrate a versatile hierarchical approach for the assembly of
     organic-inorganic, copolymermetal nanostructures in which one level of
     self-assembly quides the next. In a first step, ultrathin diblock
     copolymer films form a regular scaffold of highly anisotropic, stripe-like
     domains. During a second assembly step, differential wetting guides
     diffusing metal atoms to aggregate selectively along the scaffold,
     producing highly organized metal nanostructures. We find that, in
     contrast to the usual requirement of near-equilibrium conditions for
     ordering, the metal arranged on the copolymer scaffold produces the most
     highly ordered configurations when the system is far from equilibrium. We
     delineate two distinct assembly modes of the metal component - chains of
     separate nanoparticles and continuous wires - each characterized
     by different ordering kinetics and strikingly different current-voltage
     characteristics. These results therefore demonstrate the possibility of
     quided, large-scale assembly of laterally nanostructured systems.
CT
     Medical Descriptors:
       *nanoparticle
     polymerization
     film
     magnetic field
     system analysis
     temperature
     kinetics
     article
     priority journal
     Drug Descriptors:
       *copolymer
       *poly(methyl methacrylate)
       *polystyrene
     metal
     gold
       silver
     lead
     tin
     bismuth
     indium
     (poly(methyl methacrylate)) 39320-98-4, 9008-29-1; (polystyrene)
RN
     9003-53-6; (gold) 7440-57-5; (silver) 7440-22-4
     ; (lead) 7439-92-1; (tin) 14314-35-3, 7440-31-5; (bismuth) 7440-69-9;
     (indium) 7440-74-6
L171 ANSWER 68-OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                    1999419921 EMBASE
                    Preparation of polymer-coated functionalized
TITLE:
                    silver nanoparticles [9].
AUTHOR:
                    Quaroni L.; Chumanov G.
                    G. Chumanov, Department of Chemistry, Iowa State
CORPORATE SOURCE:
                    University, Ames, IA 50011, United States
                    Journal of the American Chemical Society, /(17 Nov 1999)
SOURCE:
                    Vol. 121, No. 45, pp. 10642-10643. .
                    ISSN: 0002-7863 CODEN: JACSAT
COUNTRY:
                    United States
DOCUMENT TYPE:
                    Journal; Letter
```

FILE SEGMENT: 029 Clinical Biochemistry

LANGUAGE: English

ENTRY DATE: Entered STN: 19991229

Last Updated on STN: 19991229

Entered STN: 19991229 ED

Last Updated on STN: 19991229

Medical Descriptors: CT\*chemical analysis

> \*synthesis \*nanoparticle polymerization

chemical modification

transmission electron microscopy

spectroscopy centrifugation

letter

Drug Descriptors:

\*polymer \*silver

RN (silver) 7440-22-4

L171 ANSWER 69 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 1999288286 EMBASE

The interaction of proteins and cells with self-assembled TITLE:

monolayers of alkanethiolates on gold and silver.

Ostuni E.; Yan L.; Whitesides G.M. AUTHOR:

G.M. Whitesides, Dept. Chemistry and Chemical Biology, CORPORATE SOURCE:

Harvard University, 12 Oxford Street, Cambridge, MA 02138,

United States. gwhitesides@gmgwgroup.harvard.edu

Colloids and Surfaces B: Biointerfaces, (1999) Vol. 15, No. SOURCE: 1, pp. 3-30. .

Refs: 196

ISSN: 0927-7765 CODEN: CSBBEQ

S 0927-7765 (99) 00004-1 PUBLISHER IDENT.:

Netherlands COUNTRY:

DOCUMENT TYPE: Journal: General Review

Biophysics, Bioengineering and Medical FILE SEGMENT: 027

Instrumentation

029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 19990903

Last Updated on STN: 19990903

Entered STN: 19990903 ED

Last Updated on STN: 19990903

Alkanethiols, HS(CH2)(n)X, chemisorb on gold and silver and form AB self-assembled monolayers (SAMs). The ability to present a variety of functional groups, X, at the terminal position of the alkanethiol makes it possible to control the structure of the surface at the molecular level, and thus to control the interfacial properties of these organic surfaces. These SAMs constitute an exceptionally useful set of model surfaces with which to study the interaction of synthetic materials with biologically relevant systems. By varying the terminal group X, it is possible to examine the influence of the structure and polarity of common organic groups on the adsorption of proteins. Alkanethiols terminated with oligo(ethylene glycol) groups form SAMs that resist the adsorption of proteins (so-called 'inert surfaces'). These alkanethiols, when used in mixed SAMs that include alkanethiols that present other functional groups, isolate the biomolecular interactions of interest from non-specific

```
effects and simplify fundamental studies of protein adsorption. Surface
plasmon resonance (SPR) is a particularly valuable technique for
measuring rates and equilibrium constants of processes that involve
adsorption of proteins at surfaces and for characterizing mechanisms of
protein adsorption. Since the techniques used in preparing SAMs for
studies of protein adsorption are essentially the same as those used in
preparing substrates for SPR, a common synthetic technology can be used
with both. Soft lithographic techniques-microprinting and
micromolding-make it possible to pattern SAMs with different
functionalities on surfaces that can be either planar or contoured. The
combination of SAMs, inert surfaces, SPR, and soft lithography allows the
study of the molecular-level interaction of solutions containing proteins
with synthetic surfaces. Extensions of these studies to investigations of
the attachment and spreading of cells on surfaces also offer a new set of
research tools in cell biology. Copyright (C) 1999 Elsevier Science B.V.
Medical Descriptors:
*adsorption
*protein interaction
surface property
adhesion
technique
prosthesis
review
priority journal
Drug Descriptors:
*protein
*thiol derivative
*gold
  *silver
*alkane derivative
  *polymer
*biomedical and dental materials
  macrogol
dimeticone
  polylactic acid
  polyethylene terephthalate
  poly(methyl methacrylate)
 polyurethan
titanium
platinum
aluminum
calcium phosphate
carbon
hydroxyapatite
  dacron
  politef
  polyethylene
  polymacon
cyanoacrylate
silicon
collagen
  polypropylene
  nylon
(protein) 67254-75-5; (thiol derivative) 13940-21-1; (gold) 7440-57-5; (
silver) 7440-22-4; (macrogol) 25322-68-3; (dimeticone)
32028-95-8, 68248-27-1, 9004-73-3, 9006-65-9; (polylactic acid)
26100-51-6; (polyethylene terephthalate) 25038-59-9,
9003-68-3; (poly(methyl methacrylate)) 39320-98-4, 9008-29-1;
(polyurethan) 61789-63-7; (titanium) 7440-32-6; (platinum) 7440-06-4;
(aluminum) 7429-90-5; (calcium phosphate) 10103-46-5, 13767-12-9,
```

RN

14358-97-5, 7758-87-4; (carbon) 7440-44-0; (hydroxyapatite) 1306-06-5, 51198-94-8; (dacron) 60527-88-0; (politef) 9002-84-0, 9039-02-5; (polyethylene) 9002-88-4; (polymacon) 25053-81-0, 25249-16-5, 98932-78-6; (cyanoacrylate) 15802-18-3; (silicon) 7440-21-3; (collagen) 9007-34-5; (polypropylene) 25085-53-4, 9003-07-0

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ACCESSION NUMBER: 1998407869 EMBASE

TITLE: In vivo efficacy of antimicrobial-coated fabric from

prosthetic heart valve sewing rings.

AUTHOR: Darouiche R.O.; Meade R.; Mansouri M.; Raad I.I. CORPORATE SOURCE: Dr. R.O. Darouiche, Veterans Affairs Medical Center,

Infectious Disease Section, 2002 Holcombe Blvd., Houston,

TX 77030, United States

SOURCE: Journal of Heart Valve Disease, (1998) Vol. 7, No. 6, pp.

639~646. Refs: 27

ISSN: 0966-8519 CODEN: JHVDEU

COUNTRY: United Kingdom DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery

027 Biophysics, Bioengineering and Medical

Instrumentation

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 19990122

Last Updated on STN: 19990122

ED Entered STN: 19990122

Last Updated on STN: 19990122

Background and aims of the study: Antimicrobial coating of medical devices AB has recently emerged as a potentially effective method for preventing device-related infections. The objective of this animal study was to examine in vivo the antimicrobial efficacy of prosthetic heart valve sewing ring fabric coated with: (i) silver; (ii) combined minocycline and rifampin (M/R); or (iii) combined chlorhexidine and chloroxylenol (CH/CX). Methods: A rabbit model of Staphylococcus aureus colonization and infection of subcutaneously implanted fabric of prosthetic heart valve sewing rings was used. Following administration of anesthesia and preoperative antibiotic prophylaxis, 0.5 x 0.5 cm samples of fabric were placed subcutaneously into the back of rabbits. Each rabbit received a total of eight samples: (i) two uncoated; (ii) two silver-coated; (iii) two M/R-coated; and (iv) two CH/CX-coated. After injecting a bacterial inoculum of 2 x 105 c.f.u. of S. aureus onto each implanted sample, the wounds were sutured. Rabbits were monitored daily for one week, killed and the test fabrics removed and cultured. Results: Rates of device colonization, device-related infection and device-related abscess were similar between the uncoated and silver-coated devices. Devices coated with M/R were less likely to be colonized or cause device-related infection when compared with uncoated devices, and less likely to be associated with abscess formation than silver-coated devices. There was a tendency for CH/CX-coated devices to be less colonized than uncoated devices. Only M/R-coated and CH/CX-coated devices produced zones of inhibition in vitro. Implantation of M/R-coated and CH/CX-coated devices in rabbits did not result in detectable systemic concentrations of the antimicrobial coating agents. Colonization of antimicrobial-coated devices was not associated with resistant S. aureus isolates. Conclusions: These results suggest that silver-coated sewing rings may not prove to be clinically

```
antiinfective. In contrast, antimicrobial- coated sewing rings that
    produce effective zones of inhibition, particularly those coated
    with M/R, are likely to be clinically protective.
    Medical Descriptors:
CT
     *heart valve prosthesis
     *graft infection: CO, complication
     *graft infection: PC, prevention
     *suturing method
     *antimicrobial therapy
     rabbit
     staphylococcus aureus
    bacterial colonization
     abscess: CO, complication
     abscess: PC, prevention
    bacterium isolate
     antibiotic sensitivity
     antibiotic prophylaxis
     nonhuman
     female
     animal experiment
     animal model
     controlled study
     animal tissue
     article
    priority journal
    Drug Descriptors:
     *antiinfective agent
     *minocycline: CB, drug combination
     *rifampicin: CB, drug combination
     *chlorhexidine: CB, drug combination
     *chloroxylenol: CB, drug combination
       silver
      polyethylene terephthalate
      politef
     (minocycline) 10118-90-8, 11006-27-2, 13614-98-7; (rifampicin) 13292-46-1;
RN
     (chlorhexidine) 3697-42-5, 55-56-1; (chloroxylenol) 1321-23-9, 88-04-0; (
     silver) 7440-22-4; (polyethylene terephthalate)
     25038-59-9, 9003-68-3; (politef) 9002-84-0, 9039-02-5
CO
     St Jude Medical (United States); Meadox (United States); Vascutek
     (United Kingdom); Sulzer carbomedics (United States)
L171 ANSWER 71-OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                    1998376643 EMBASE
TITLE:
                    Electrochemical prevention of marine biofouling on a novel
                    titanium- nitride-coated plate formed by radio-frequency
                    arc spraying.
                    Nakayama T.; Wake H.; Ozawa K.; Nakamura N.; Matsunaga T.
AUTHOR:
                    T. Matsunaga, Department of Biotechnology, Tokyo Univ. of
CORPORATE SOURCE:
                    Agriculture/Technol., Koganei, Tokyo 184-8588, Japan.
                    tmatsuna@cc.tuat.ac.jp
                    Applied Microbiology and Biotechnology, (1998) Vol. 50, No.
SOURCE:
                    4, pp. 502-508. .
                    Refs: 35
                    ISSN: 0175-7598 CODEN: AMBIDG
COUNTRY:
                    Germany
DOCUMENT TYPE:
                    Journal; Article
                            Microbiology
FILE SEGMENT:
                    004
                            Environmental Health and Pollution Control
                    046
LANGUAGE:
                    English
```

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 19981130

Last Updated on STN: 19981130

ED Entered STN: 19981130

Last Updated on STN: 19981130

We have developed a new method for forming titanium-nitride(TiN)-coated AB plates using radio-frequency arc spraying (RFAS). A TiN coating formed by RFAS has been used for electrochemical prevention of marine biofouling. X- ray diffraction and X-ray photoelectron spectroscopy indicate that a TiN composite film containing Ti was formed on a polyethylene terephthalate plate surface when Ti was sprayed by RFAS under atmospheric pressure. A cyclic voltammogram (scan rate 20 mV/s) of the TiN formed by RFAS revealed no oxidative and reductive peak currents in the range -0.6 V to 1.2 V against a saturated silver /silver chloride (Ag/AgCl) electrode. When a potential of 1.0 V against Ag/AgCl was applied to the electrode in seawater, no dissolved Ti was detected. Changes in pH and the chlorine concentration were not observed in this range. In all, only 4.5% of the Vibrio alginolyticus cells attached to the electrode survived when a potential of 0.8 V against Ag/AgCl was applied in seawater for 30 min. In field experiments, attachment of the organisms to the TiN electrode was inhibited by applying an alternating potential of 1.0 V and -0.6 V against Ag/AgCl. The TiN film can be formed by RFAS on large and intricately shaped surfaces, and it is a practical electrode for the electrochemical prevention of fouling of various marine structures.

CT Medical Descriptors:

\*electrochemical analysis

\*marine environment

\*radiofrequency

\*vibrio alginolyticus

nebulization

X ray diffraction

cyclic potentiometry

biofilm

nonhuman

article

Drug Descriptors:

\*titanium derivative

\*silver

\*silver chloride

\*silver derivative

\*polyethylene terephthalate

\*sea water

chlorine

unclassified drug

RN (silver) 7440-22-4; (silver chloride)

7783-90-6; (polyethylene terephthalate) 25038-59-9,

9003-68-3; (chlorine) 13981-72-1, 7782-50-5

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ACCESSION NUMBER: 1998359596 EMBASE

TITLE: Metal-ion mediated separation of propylene from propane

using PPO membranes.

AUTHOR: Bai S.; Sridhar S.; Khan A.A.

CORPORATE SOURCE: A.A. Khan, Membrane Separations Group, Chemical Engineering

Division, Indian Institute Chemical Technology, Hyderabad

500 007, India. aakhan@csiict.ren.nic

SOURCE: Journal of Membrane Science, (19 Aug 1998) Vol. 147, No. 1,

pp. 131-139. .

Refs: 15

ISSN: 0376-7388 CODEN: JMESDO

PUBLISHER IDENT.:

S 0376-7388(98)00140-9

COUNTRY:

Netherlands Journal; Article

DOCUMENT TYPE: FILE SEGMENT:

027 Biophysics, Bioengineering and Medical

Instrumentation

029 Clinical Biochemistry

LANGUAGE:

English

SUMMARY LANGUAGE:

English

ENTRY DATE:

Entered STN: 19981112

Last Updated on STN: 19981112

ED Entered STN: 19981112

Last Updated on STN: 19981112

Tests with mixture of gases were carried out at room temperature (30  $\pm$ AΒ 2°C) to determine selectivities and permeabilities of propylene and propane. The ideal selectivities of the membranes towards the olefin were also evaluated. Metal-incorporated poly (2,6-dimethyl-1,4-phenyleneoxide), (PPO) membrane was used for facilitating transport of the olefin through the membranes. The metals incorporated were Silver (Ag(I)), Palladium (Pd(II)), Ruthenium (Ru(III)) and Iridium (Ir(III)). PPO showed high ideal selectivities with respect to propylene. Among the metal-incorporated PPO membranes, significantly improved flux and selectivity was obtained especially for Ru(III) and Pd(II). Pd-PPO membranes exhibited two-fold improvement in propylene permeance with improved selectivity from 3.44 to 5.33. The membranes were characterised by Fourier Transform Infra Red spectroscopy (FTIR), Inductively Coupled Atomic Emission Spectroscopy (ICP-AES), Wide Angle X-ray-Diffraction (WAXD) and density measurements to understand the structural characteristics of the membrane responsible for the observed behaviour. From IR results the metals particularly Ru, Pd, Ag, Ir were found to interact with the **polymer**. The improved selectivity values of the metal incorporated polymers have been explained by a decrease in the effective distance (d(eff)) between the adjacent intersegmental chains due to formation of metal-ion complex with the polymer matrix and hence a decrease in the free volume of the polymer upon metal incorporation. However, the significant improvements in the propylene permeabilities have been realised mainly due to the selective transport of propylene molecules mediated by the incorporation of selected metal ions.

CT Medical Descriptors:

polymer

\*membrane filter membrane permeability atomic emission spectrometry X ray diffraction membrane structure complex formation gas transport article priority journal Drug Descriptors: \*propylene \*propane alkene silver palladium ruthenium

iridium RN (propylene) 115-07-1; (propane) 74-98-6; (silver) 7440-22-4; (ruthenium)

## 7440-18-8; (iridium) 13967-67-4, 7439-88-5

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ACCESSION NUMBER: 97046168 EMBASE

DOCUMENT NUMBER: 1997046168

TITLE: Passage of silver ions through membrane-mimetic

materials, and its relevance to treatment of burn wounds

with silver sulfadiazine cream.

AUTHOR: Tsipouras N.; Rix C.J.; Brady P.H.

CORPORATE SOURCE: C.J. Rix, Department of Applied Chemistry, Royal Melbourne

Inst. of Technology, GPO Box 2476V, Melbourne, Vic. 3001,

Australia. C.RIX@rmit.edu.au

SOURCE: Clinical Chemistry, (1997) Vol. 43, No. 2, pp. 290-301. .

Refs: 13

ISSN: 0009-9147 CODEN: CLCHAU

COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 009 Surgery

013 Dermatology and Venereology

029 Clinical Biochemistry 037 Drug Literature Index

052 Toxicology

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 970310

Last Updated on STN: 970310

ED Entered STN: 970310

Last Updated on STN: 970310

AΒ Treatment of acute burn wounds with silver sulfadiazine has raised concern of potential silver toxicity. As the wound heals, a barrier forms between the silver sulfadiazine and the blood, but this membrane is not impenetrable, and so silver absorption is still possible. In this work, we have modeled chemical systems to investigate the transport of silver sulfadiazine and silver chloride through cellulose, chitosan, collagen, and polyethylene membranes into the following media: synthetic serum electrolyte solution (SSES), SSES plus glutathione, and human serum, to simulate some of the chemical processes occurring at a burn wound during healing. Our results clearly indicate that membranes can retard the movement of silver ions, especially those that have silver-binding properties. This suggests that silver absorption at a healing wound will be minimized by entrapment of silver in the growing membrane network, and thus the likelihood of silver toxicity will be reduced.

CT Medical Descriptors:

\*argyria: CO, complication \*argyria: PC, prevention \*burn: DT, drug therapy

\*membrane model \*wound healing

article

cream

drug absorption

granulation tissue membrane transport

topical drug administration

Drug Descriptors:

\*silvazine: DT, drug therapy

\*silver

```
*sulfadiazine silver: DT, drug therapy
     cellulose
     chitosan
     collagen
     electrolyte
     glutathione
       polyethylene
       silver nitrate
     unclassified drug
     (silver) 7440-22-4; (sulfadiazine silver)
RN
     22199-08-2; (cellulose) 61991-22-8, 68073-05-2, 9004-34-6; (chitosan)
     9012-76-4; (collagen) 9007-34-5; (glutathione) 70-18-8; (polyethylene)
     9002-88-4; (silver nitrate) 7761-88-8
CN
     (1) Silvazine
     (1) Smith and nephew (Australia); Sigma (United States)
CO
L171 ANSWER 74 OF 103 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                    97234431 EMBASE
DOCUMENT NUMBER:
                    1997234431
                    Wall deposition of radon progeny and particles in a
TITLE:
                    spherical chamber.
AUTHOR:
                    Yung Sung Cheng
                   Y.S. Cheng, Lovelace Respiratory Research Inst.,
CORPORATE SOURCE:
                   Albuquerque, NM 87185, United States
                   Aerosol Science and Technology, (1997) Vol. 27, No. 2, pp.
SOURCE:
                    131-146. .
                   Refs: 31
                    ISSN: 0278-6826 CODEN: ASTYDQ
                   S 0278-6826(97)00003-2
PUBLISHER IDENT.:
                   United States
COUNTRY:
DOCUMENT TYPE:
                   Journal; Article
FILE SEGMENT:
                   035
                            Occupational Health and Industrial Medicine
                   046
                            Environmental Health and Pollution Control
LANGUAGE:
                   English
SUMMARY LANGUAGE:
                   English
                   Entered STN: 970829
ENTRY DATE:
                   Last Updated on STN: 970829
ED
     Entered STN: 970829
     Last Updated on STN: 970829
     In indoor and mining environments, deposition to 'plate-out' of radon
AB.
     progeny onto walls occurs simultaneously with the attachment of progeny of
     airborne particles. Attachment and plate-out processes affect the
     atmosphere in which radon exposure takes place by reducing
     concentrations and shifting activity size distributions. Deposition of
     fine particles on paintings and other art objects is also a concern in
     museums. Here we describe plate-out measurements of radon progeny and
     aerosol particles in a spherical chamber under controlled
     laboratory conditions. The temperature and velocity profiles in still and
     turbulent air were monitored. A laboratory mixer with variable speeds and
     speed control was used to increase turbulence in the chamber. During
     mixing, air velocity was detected when rotational speeds were higher than
     500 rpm. Monodisperse silver aerosols and polystyrene latex
     particles in the size range of 5 nm to 2 \mu m were used in the deposition
     study. Nanometer particles between 0.88 to 1.80 nm were generated by
     passing 220Rn gas into the chamber and letting the gas decay into 212Pb.
     The deposition rates of particles and radon progeny (212Pb) in the chamber
     were determined by monitoring the concentration decay of the aerosol as a
     function of time. Our data confirmed that the homogeneous turbulence
     model can be used to describe the wall deposition rate in still and mixing
```

conditions. Higher deposition rates were observed during increased air mixing. Higher rates were more significant for particles smaller than 1.0 μm, indicating that the turbulence produced by mixing increased the turbulent diffusional deposition. The coefficient of eddy diffusivity was predicted by the mass transfer equation. The coefficient was also reasonably predicted from a technique using velocity measurement and from an energy dissipation equation.

Medical Descriptors: CT

\*aerosol

\*airborne particle \*radiation detection ambient air article

atmospheric dispersion dry deposition particle size prediction

priority journal turbulent flow Drug Descriptors: \*radon

\*radon daughter polystyrene silver

(radon) 10043-92-2; (polystyrene) 9003-53-6; (silver) RN 7440-22-4

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ACCESSION NUMBER: 96300489 EMBASE

DOCUMENT NUMBER: 1996300489

TITLE: Nasal deposition of ultrafine particles in human volunteers

and its relationship to airway geometry.

Cheng Y.S.; Yeh H.C.; Guilmette R.A.; Simpson S.Q.; Cheng AUTHOR:

K.H.; Swift D.L.

CORPORATE SOURCE: Inhalation Toxicology Research Inst., P.O. Box

5890, Albuquerque, NM 87185, United States

Aerosol Science and Technology, (1996) Vol. 25, No. 3, pp. SOURCE:

274-291.

ISSN: 0278-6826 CODEN: ASTYDQ

COUNTRY: United States DOCUMENT TYPE: Journal; Article

Biophysics, Bioengineering and Medical FILE SEGMENT: 027

Instrumentation

Environmental Health and Pollution Control 046

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 961021

Last Updated on STN: 961021

ED Entered STN: 961021

Last Updated on STN: 961021

Very large and very small particles most often deposit in the nasal AB airways. Human volunteers have often been used in deposition studies using particles  $> 0.5 \mu m$ , whereas physical airway models have been used in studies of ultrafine particle deposition. Studies in airway models provide large data sets with which to evaluate the deposition mechanism, while in vivo deposition data are needed to validate results obtained with nasal models. Four adult male, nonsmoking, healthy human volunteers (ages 36-57 yr) participated in this study. Deposition was measured in each subject at constant flow rates of 4, 7.5, 10, and 20 L

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min-1. Monodisperse silver particles (5, 8, and 20 nm) and
polystyrene latex particles (50 and 100 nm) were used. Each subject held
his breath for 30-60 sec, during which time, the aerosol was drawn through
the nasal airway and exhausted through a mouth tube. Aerosol
concentrations in the intake and exhaust air were measured by an ultrafine
condensation particle counter. The deposition efficiency in the
nasal airway was calculated taking into account particle losses
in the mask, mouth tube, and transport lines. Our results were consistent
with the turbulent diffusional deposition model previously established
from studies using nasal airway casts. However, nasal deposition varied
widely among the four subjects. From magnetic resonance imaging data of
in vivo nasal airway dimensions for the subjects in this study, we
calculated the mean cross- sectional area (A-(c)), mean perimeter (P-r),
and total surface area (A(s)) of the individual nasal passages. The
turbulent diffusional deposition model was extended to provide a
relationship between deposition efficiency and nasal airway dimensions.
Our results suggested that deposition can be correlated using the
parameter of (A(s)/A-(c)0.75(P-r)0.45. This information indicates a
higher nasal deposition for a person with a smaller cross-sectional area,
larger surface area, and larger perimeter. This approach has significant
potential for future research in the area of intersubject variability of
aerosol and vapor deposition.
Medical Descriptors:
*air pollutant
  *airborne particle
*nose mucosa
adult
allergic reaction
article
```

atmospheric dispersion clinical protocol host resistance human human experiment male normal human nose congestion nuclear magnetic resonance imaging particle size priority journal respiratory epithelium \*aerosol Drug Descriptors: \*polystyrene \*silver (polystyrene) 9003-53-6; (silver) 7440-22-4

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reserved on STN

ACCESSION NUMBER: 80067825 EMBASE

DOCUMENT NUMBER:

TITLE: [Spread of hepatitis B virus infection among family

contacts of asymptomatic HB(s)Ag carriers].

DIE AUSBREITUNG VON HEPATITIS-B-INFEKTIONEN IN FAMILIEN

HB(S)AG-POSITIVER TRAGER.

AUTHOR: Dormeyer H.H.; Hess G.; Born M.; et al.

II Med Klin., Univ. Mainz, Germany CORPORATE SOURCE:

Klinische Wochenschrift, (1979) Vol. 57, No. 23, pp. SOURCE:

> 1287-1294. CODEN: KLWOAZ

COUNTRY: Germany DOCUMENT TYPE: Journal

FILE SEGMENT: 047 Virology

026 Immunology, Serology and Transplantation

017 Public Health, Social Medicine and Epidemiology

048 Gastroenterology

LANGUAGE: German SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 911209

Last Updated on STN: 911209

ED Entered STN: 911209

Last Updated on STN: 911209

AB Family members of 34 asymptomatic HB(s)Ag carriers were tested for different hepatitis B virus (HBV) markers. Among 67 family members tested 24 (36%) presented signs of a past or ongoing HBV-infection. Spread of HBV-infection was particularly high in those families in which

the HB(s)Ag carrier was positive for HB(e)Ag and Dane

particle-associated DNA polymerase activity.

Non-parental 'horizontal' transmission of HBV among spouses and brothers and sisters and probably parenteral vertical transmission of HBV from carrier mothers to their infants occurred in approximately the same frequency. Fathers transmitted HBV unfrequently to their offsprings. The results show that the risk to acquire a HBV-infection from an asymptomatic HB(s)Ag carrier is closely linked to the serological findings in the HB(e)/anti-HB(e)-system of the index HB(s)Ag carrier and not to the family relationship to the HB(s)Ag carrier.

CT Medical Descriptors:

\*hepatitis b virus

\*virus carrier

\*virus infection

\*virus transmission

family pregnancy human cell

major clinical study

epidemiology

liver

Drug Descriptors:

\*virus antigen

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ACCESSION NUMBER: 79209017 EMBASE

DOCUMENT NUMBER: 1979209017

TITLE: [Markers of infectivity and diffusion of hepatitis virus B

infection in a dialysis unit].

I MARCATORI DI INFETTIVITA E DIFFUSIONE DELLA INFEZIONE DA

VIRUS B DELL'EPATITE IN UNA UNITA DIALITICA.

AUTHOR: Dentico P.; Angarano G.; Lapedota E.; et al.

CORPORATE SOURCE: Ist. Mal. Infett., Univ. Bari, Italy

SOURCE: Minerva Nefrologica, (1979) Vol. 26, No. 2, pp. 195-198. .

CODEN: MINEAT

COUNTRY: Italy DOCUMENT TYPE: Journal

FILE SEGMENT: 047 Virology

028 Urology and Nephrology

048 Gastroenterology

LANGUAGE: Italian SUMMARY LANGUAGE: English

AB In order to evaluate the relationship between so-called infectivity

markers (HB(e) Ag and Dane-particle-associated DNApolymerase activity) and spread of hepatitis B virus (HBV) infection in a dialysis unit, sera of 21 patients undergoing chronic hemodialysis and of 25 staff members were tested for the presence of HB(s)Ag, anti-HB(s), anti-HB(c), HB(e)Ag, anti-HB(e), and DNApolymerase activity. Four out of 21 patients (19%) were HB(s)Ag+, DNA-P+, anti-HB(c)+, and 3 of them carried HB(e)Ag. Of 17 HB(s)Agpatients, 7 had anti-HB(c) and anti-HB(s), 3 had anti-HB(c) alone and 4 anti-HB(s) alone. Of 25 staff members 2 were HB(s)Ag+ (8%), both carrying anti-HB(c), but none had HB(e)Ag or DNA-P. Of 23 HB(s)Ag- subjects, 7 had anti-HB(c) and anti-HB(s)+, 8 had anti-HB(c) alone and 2 anti-HB(s) alone. Although 18 out of 21 patients (85.7%) and 19 out of 25 staff members (76%) had serological evidence of HBV infection, none of them showed clinical or biochemical signs of hepatitis during 2 years observation period. The high prevalence of HBV infection among exposed patients and staff could be likely ascribed to the presence of infectivity markers in all HB(s)Aq positive hemodialysed patients and to a higher contagiousness of these subjects.

CT Medical Descriptors:

\*hemodialysis

\*hepatitis b virus

\*virus transmission

diffusion

infection

human cell

major clinical study

epidemiology

liver

kidney

Drug Descriptors:

virus antigen

L171 ANSWERS OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

ACCESSION NUMBER:

2002:158539 BIOSIS

DOCUMENT NUMBER:

PREV200200158539

TITLE:

Flow cytometry with excitation into surface plasmon resonance bands of antibody-linker-gold or silver

nanoparticle-aminodextran-

polystyrene bead conjugates as white

blood cell markers.

AUTHOR (S):

Siiman, Olavi [Reprint author]; Gordon, Kristie [Reprint author]; Burshteyn, Alexander [Reprint author]; Maples,

John [Reprint author]

CORPORATE SOURCE:

Advanced Technology, Beckman\_Coulter, Inc., Miami, FL, USA

SOURCE: Cytometry Supplement, (2000) 6. 10, pp. 40.

print.

Meeting Info.: The XX Congress of the International Society for Analytical Cytology. Montpellier, France. May 20-25, 2000. International Society for Analytical Cytology.

ISSN: 1046-7386.

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 21 Feb 2002

Last Updated on STN: 26 Feb 2002

ED Entered STN: 21 Feb 2002

Last Updated on STN: 26 Feb 2002

CC General biology - Symposia, transactions and proceedings 00520

Cytology - Animal 02506

Biochemistry studies - General 10060 Blood - Blood and lymph studies 15002 Blood - Blood cell studies 15004

Immunology - General and methods 34502

IT Major Concepts

Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Methods and Techniques

IT Parts, Structures, & Systems of Organisms

CD4 positive lymphocytes: blood and lymphatics, immune system; CD8 positive lymphocytes: blood and lymphatics, immune system; white blood cell: blood and lymphatics, immune system

IT Chemicals & Biochemicals

aminodextran-polystyrene: latex bead;
gold nanoparticle; silver nanoparticle

IT Methods & Equipment

flow cytometry: analytical method, cytophotometry

IT Miscellaneous Descriptors

Meeting Abstract

L171 ANSWER 79 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 1999:36092 BIOSIS DOCUMENT NUMBER: PREV199900036092

TITLE: Enhanced growth of human vascular endothelial cells on

negative ion (Ag-)-implanted hydrophobic surfaces.

AUTHOR(S): Sato, Hiroko [Reprint author]; Tsuji, Hiroshi; Ikeda, Shigeo; Ikemoto, Noburo; Ishikawa, Junzo; Nishimoto,

Sei-Ichi

CORPORATE SOURCE: Dep. Polymer Chem., Kyoto Univ., Kyoto 606-8501, Japan

SOURCE: Journal of Biomedical Materials Research, (Jan.,

1999) Vol. 44, No. 1, pp. 22-30. print.

CODEN: JBMRBG. ISSN: 0021-9304.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 3 Feb 1999

Last Updated on STN: 3 Feb 1999

ED Entered STN: 3 Feb 1999

Last Updated on STN: 3 Feb 1999

- Silver negative ions (Ag-) were implanted to an insulator, polystyrene, in AΒ a relatively low ion energy ranging from 5 to 30 keV, and in a dose ranging from 1014 to 6 X 1016 ionscntdotcm-2. Surfaces of Ag-implanted polystyrene were studied by means of secondary ion mass spectrometry, X-ray photoelectron spectroscopy, Fourier transform infrared spectroscopy, and micro-Raman spectroscopy, and contact angle measurement. As a result of Ag- implantation, the polystyrene surfaces underwent degradation, thereby becoming more hydrophilic with increasing dose and ion energy except an ion energy of 30 keV. The Ag- implantation in polystyrene led to enhanced growth of human vascular endothelial cells, which grew to more extent with increased hydrophilicity of Aq-implanted surfaces except an ion energy of 30 keV. Polystyrene surfaces on which Aq- were implanted up to an ion energy of 30 keV caused the same hydrophobic level as polystyrene surface itself. Nevertheless, the Ag-implanted polystyrene showed relatively good biocompatibility different from polystyrene. Such an improvement in cell adhesion may be related to the formation of a graphite-like structure on polystyrene surfaces by a Ag-implanted process. Moreover, upon plating in a high cell density, human vascular endothelial cells survived even on the polystyrene region of Ag-implanted polystyrene for longer than 1.5 months, while the cells did not grow on untreated polystyrene in the same culture conditions.
- CC Cardiovascular system General and methods 1450

Cytology - Human 02508

Biochemistry methods - General 10050 Biochemistry studies - General 10060

IT Major Concepts

Biomaterials; Cell Biology

IT Chemicals & Biochemicals

polystyrene; silver negative ions

IT Miscellaneous Descriptors

contact angle; negative ion-implanted hydrophobic surfaces

ORGN Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

HUVEC cell line: human umbilical vein endothelial cells

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN 9003-53-6 (polystyrene) 7440-22-4 (SILVER)

L171 ANSWER 80 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER:

1999:23998 BIOSIS

DOCUMENT NUMBER:

PREV199900023998

TITLE:

Electrochemical prevention of marine biofouling on a novel titanium-nitride-coated plate formed by radio-frequency arc

spraying.

AUTHOR (S):

Nakayama, T.; Wake, H.; Ozawa, K.; Nakamura, N.; Matsunaga,

T. [Reprint author]

CORPORATE SOURCE:

Dep. Biotechnol., Tokyo Univ. Agric. Technol., Koganei,

Tokyo 184-8588, Japan

SOURCE:

Applied Microbiology and Biotechnology, (Oct., 1998

) Vol. 50, No. 4, pp. 501-508. print.

CODEN: AMBIDG. ISSN: 0175-7598.

DOCUMENT TYPE:

LANGUAGE:

Article English

ENTRY DATE:

Entered STN: 20 Jan 1999

Last Updated on STN: 20 Jan 1999

ED Entered STN: 20 Jan 1999

Last Updated on STN: 20 Jan 1999

We have developed a new method for forming titanium-nitride(TiN)-coated AB plates using radio-frequency arc spraying (RFAS). A TiN coating formed by RFAS has been used for electrochemical prevention of marine biofouling. X-ray diffraction and X-ray photoelectron spectroscopy indicate that a TiN composite film containing Ti was formed on a polyethylene terephthalate plate surface when Ti was sprayed by RFAS under atmospheric pressure. A cyclic voltammogram (scan rate 20 mV/s) of the TiN formed by RFAS revealed no oxidative and reductive peak currents in the range -0.6 V to 1.2 V against a saturated silver/silver chloride (Ag/AgCl) electrode. When a potential of 1.0 V against Ag/AgCl was applied to the electrode in seawater, no dissolved Ti was detected. Changes in pH and the chlorine concentration were not observed in this range. In all, only 4.5% of the Vibrio alginolyticus cells attached to the electrode survived when a potential of 0.8 V against Ag/AgCl was applied in seawater for 30 min. field experiments, attachment of the organisms to the TiN electrode was inhibited by applying an alternating potential of 1.0 V and -0.6 V against Ag/AgCl. The TiN film can be formed by RFAS on large and intricately shaped surfaces, and it is a practical electrode for the electrochemical prevention of fouling of various marine structures.

CC Biochemistry methods - General 10050

```
Bacteriology, general and systematic
                                            30000
     Food microbiology - General and miscellaneous
                                                      39008
     General biology - Miscellaneous
IT
     Major Concepts
        Bacteriology; Bioprocess Engineering; Methods and Techniques;
        Sanitation
IT
     Chemicals & Biochemicals
        titanium: titanium-nitride
IT
     Methods & Equipment
        cyclic voltammogram: analytical method; radio-frequency arc spraying:
        disinfection method; X-ray diffraction: analytical method; X-ray
        photoelectron spectroscopy: analytical method
TT
     Miscellaneous Descriptors
        marine biofouling: electrochemical prevention; polyethylene
        terephthalate plate; seawater; silver/silver chloride electrode;
        titanium-nitride-coated plate: formation
ORGN Classifier
        Vibrionaceae
                       06704
     Super Taxa
        Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria;
        Microorganisms
     Organism Name
        Vibrio-alginolyticus
     Taxa Notes
        Bacteria, Eubacteria, Microorganisms
     7440-32-6 (titanium)
RN
     11116-16-8Q (titanium-nitride)
     25583-20-4Q (titanium-nitride)
       7440-22-4 (SILVER)
     7783-90-6 (SILVER CHLORIDE)
       25038-59-9 (POLYETHYLENE TEREPHTHALATE)
L171 ANSWER 81 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
     STN
                    1998:426666 BIOSIS
ACCESSION NUMBER:
                    PREV199800426666
DOCUMENT NUMBER:
                    Effect of mulch type and color on honeydew melon (Cucumis
TITLE:
                    melo L.) production in Western Mexico.
                    Farias-Larios, J.; Sandoval, C.; Radillo, F.; Lopez, J. G.;
AUTHOR (S):
                    Guzman, S.
                    Fac. Ciencias Biol. Agropecuarias, Univ. Colima, Apartado
CORPORATE SOURCE:
                    Postal 36, 28100 Tecoman, Colima, Mexico
                    Hortscience, (June, 1998) Vol. 33, No. 3, pp.
SOURCE:
                    475. print.
                    Meeting Info.: 95th Annual International Conference of the
                    American Society for Horticultural Science. Charlotte,
                    North Carolina, July 12-15, 1998. American Society for
                    Horticultural Science.
                    CODEN: HJHSAR. ISSN: 0018-5345.
DOCUMENT TYPE:
                    Conference; (Meeting)
                    Conference; Abstract; (Meeting Abstract)
                    Conference; (Meeting Poster)
LANGUAGE:
                    English
                    Entered STN: 2 Oct 1998
ENTRY DATE:
                    Last Updated on STN: 2 Oct 1998
ED
     Entered STN: 2 Oct 1998
    Last Updated on STN: 2 Oct 1998
CC
    Horticulture - Vegetables
                                53008
     Plant physiology - Growth, differentiation
     Soil science - Fertility and applied studies
```

```
General biology - Symposia, transactions and proceedings
                                                                 00520
IT
     Major Concepts
        Horticulture (Agriculture)
     Miscellaneous Descriptors
IT
        mulch color: black, black/silver, brown, clear, white, silver/black;
        mulch type: corn straw, plastic, rice straw, polyethylene; vegetable
        crop production; Meeting Abstract; Meeting Poster
GT
     Mexico (North America, Nearctic region)
ORGN Classifier
        Cucurbitaceae
                        25890
     Super Taxa
        Dicotyledones; Angiospermae; Spermatophyta; Plantae
        Cucumis-melo [honeydew melon]: cultivar-Honey Brew, vegetable crop
        Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants
     7440-22-4 (SILVER)
RN
       9002-88-4 (POLYETHYLENE)
L171 ANSWER 82 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
     STN
ACCESSION NUMBER:
                    1997:51496 BIOSIS
DOCUMENT NUMBER:
                    PREV199799350699
                    Vertical and cross-furrow movement of Phytophthora capsici
TITLE:
                    in field soil.
                    Mereddy, R.; Lindsey, D.; Cardenas, E.; Cantu, G.
AUTHOR(S):
                    Dep. Entomology Plant Pathology Weed Science, New Mexico
CORPORATE SOURCE:
                    State Univ., Box 3BE, Las Cruces, NM 88003, USA
                    Phytopathology, (1996) Vol. 86, No. 11 SUPPL.,
SOURCE:
                    pp. S62-S63.
                    Meeting Info.: Annual Meeting of the American
                    Phytopathological Society, North Central Division.
                    Indianapolis, Indiana, USA. July 27-31, 1996.
                    CODEN: PHYTAJ. ISSN: 0031-949X.
DOCUMENT TYPE:
                    Conference; (Meeting)
                    Conference; Abstract; (Meeting Abstract)
LANGUAGE:
                    English
ENTRY DATE:
                    Entered STN: 4 Feb 1997
                    Last Updated on STN: 5 Feb 1997
ED
     Entered STN: 4 Feb 1997
     Last Updated on STN: 5 Feb 1997
CC
     General biology - Symposia, transactions and proceedings
     Ecology: environmental biology - Plant
                                              07506
     Plant physiology - Water relations
     Soil science - Fertility and applied studies
                                                     52807
     Horticulture - Vegetables
                                 53008
     Phytopathology - Diseases caused by fungi
     Major Concepts
IT
        Ecology (Environmental Sciences); Horticulture (Agriculture);
        Infection; Physiology; Soil Science
     Chemicals & Biochemicals
IT
        POLYETHYLENE; SILVER
TT
     Miscellaneous Descriptors
        BLACK; CROSS-FURROW; FIELD METHOD; FUNGAL MOVEMENT; FURROW-ALTERNATE
        ROW IRRIGATION; HORTICULTURE; HOST; INFECTION; MULCH; PHYTOPATHOGEN;
        POLYETHYLENE MULCH; SILVER; SOIL SCIENCE; SUBSURFACE DRIP DAILY
        IRRIGATION; SUBSURFACE DRIP 3 DAY IRRIGATION; VERTICAL; WHITE ON BLACK
ORGN Classifier
        Fungi
                15000
     Super Taxa
```

## E. Arnold 10/825,930

Plantae Organism Name fungus Taxa Notes Fungi, Microorganisms, Nonvascular Plants, Plants ORGN Classifier Phycomycetes 15900 Super Taxa Fungi; Plantae Organism Name Phytophthora capsici Taxa Notes Fungi, Microorganisms, Nonvascular Plants, Plants ORGN Classifier 11000 Plantae Super Taxa Plantae Organism Name plant Plantae Taxa Notes Plants ORGN Classifier Solanaceae 26775 Super Taxa Dicotyledones; Angiospermae; Spermatophyta; Plantae Organism Name pepper Taxa Notes Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants 9002-88-4 (POLYETHYLENE) RN 7440-22-4 (SILVER) L171 ANSWER 83 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN ACCESSION NUMBER: 1997:51495 BIOSIS PREV199799350698 DOCUMENT NUMBER: Effect of irrigation methods and polyethylene mulches on TITLE: disease severity of Phytophthora root rot on chili peppers caused by Phytophthora capsici. Cardenas, E. S.; Lindsey, D. L.; Xie, J.; Mereddy, R. AUTHOR (S): New Mexico State Univ., Las Cruces, NM 88003, USA CORPORATE SOURCE: Phytopathology, (1996) Vol. 86, No. 11 SUPPL., SOURCE: pp. S62. Meeting Info.: Annual Meeting of the American Phytopathological Society, North Central Division. Indianapolis, Indiana, USA. July 27-31, 1996. CODEN: PHYTAJ. ISSN: 0031-949X. DOCUMENT TYPE: Conference; (Meeting) Conference; Abstract; (Meeting Abstract) LANGUAGE: English Entered STN: 4 Feb 1997 ENTRY DATE: Last Updated on STN: 5 Feb 1997 Entered STN: 4 Feb 1997 ED Last Updated on STN: 5 Feb 1997 General biology - Symposia, transactions and proceedings CC 00520 Plant physiology - Water relations 51502 Plant physiology - Growth, differentiation 51510 Soil science - Fertility and applied studies Horticulture - Vegetables 53008

```
Phytopathology - Diseases caused by fungi
     Major Concepts
IT
        Development; Horticulture (Agriculture); Infection; Physiology; Soil
        Science
     Chemicals & Biochemicals
IT
        POLYETHYLENE; SILVER
     Miscellaneous Descriptors
IT
        ALTERNATE ROW FURROW IRRIGATION; BIOBUSINESS; BLACK; DISEASE SEVERITY;
        FIELD METHOD; FUNGAL DISEASE; GREEN; HORTICULTURE; HOST; INFECTION;
        PHYTOPATHOGEN; PHYTOPHTHORA ROOT ROT; POLYETHYLENE MULCH; RED; SILVER
        ON BLACK; SUBSURFACE DRIP DAILY IRRIGATION; SUBSURFACE DRIP 3 DAY
        IRRIGATION; WHITE ON BLACK; YIELD
ORGN Classifier
        Fungi
                15000
     Super Taxa
        Plantae
     Organism Name
        fungus
     Taxa Notes
        Fungi, Microorganisms, Nonvascular Plants, Plants
ORGN Classifier
        Phycomycetes
                       15900
     Super Taxa
        Fungi; Plantae
     Organism Name
        Phytophthora capsici
     Taxa Notes
        Fungi, Microorganisms, Nonvascular Plants, Plants
ORGN Classifier
        Plantae
                  11000
     Super Taxa
        Plantae
     Organism Name
        plant
        Plantae
     Taxa Notes
        Plants
ORGN Classifier
                     26775
        Solanaceae
     Super Taxa
        Dicotyledones; Angiospermae; Spermatophyta; Plantae
     Organism Name
        chili pepper
        Capsicum annuum
     Taxa Notes
        Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants
     9002-88-4 (POLYETHYLENE)
RN
       7440-22-4 (SILVER)
L171 ANSWER 84 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
     STN
ACCESSION NUMBER:
                    1996:33527 BIOSIS
DOCUMENT NUMBER:
                    PREV199698605662
                    Adherence of organisms to silver-coated surfaces.
TITLE:
                    Ahearn, D. G. [Reprint author]; May, L. L.; Gabriel, M. M.
AUTHOR(S):
                    Georgia State University, Biol. Dep., Atlanta, GA
CORPORATE SOURCE:
                    30302-4010, USA
                    Journal of Industrial Microbiology, (1995) Vol.
SOURCE:
                    15, No. 4, pp. 372-376.
                    CODEN: JIMIE7. ISSN: 0169-4146.
```

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DOCUMENT TYPE:
                    Article
                    English
LANGUAGE:
                    Entered STN: 26 Jan 1996
ENTRY DATE:
                    Last Updated on STN: 27 Jan 1996
     Entered STN: 26 Jan 1996
     Last Updated on STN: 27 Jan 1996
AB
     Pure silver-, silver oxide- and silver chloride-treated surfaces in
     comparison to polypropylene inhibited both growth and adherence from
     saline of Serratia marcescens, Staphylococcus epidermidis, Pseudomonas
     aeruginosa and Candida albicans. These same organisms demonstrated
     enhanced adherence to an Ion-Beam-Assisted-Deposited silver surface
     followed by loss of viability. This type of surface in contrast to the
     other silver surfaces did not produce zones of inhibition in agar
     diffusion tests.
    Methods - Laboratory methods
                                   01004
CC
     Cytology - Plant 02504
     Biochemistry methods - Lipids
                                     10056
     Biochemistry studies - General
                                     10060
     Biochemistry studies - Carbohydrates
    Biochemistry studies - Minerals 10069
    Biophysics - Molecular properties and macromolecules 10506
    Microorganisms - General
                               29500
    Morphology and cytology of bacteria
                                           30500
     Physiology and biochemistry of bacteria
                                                31000
    Medical and clinical microbiology - General and methods
                                                                36001
    Medical and clinical microbiology - Bacteriology
Medical and clinical microbiology - Mycology 3600
     Public health - Disinfection, vector control and pesticides
                                                                    37008
     Food microbiology - General and miscellaneous 39008
    Disinfection, disinfectants and sterilization - 39500
     Plant physiology - Growth, differentiation
                                                 51510
     Plant physiology - Growth substances
                                            51514
IT
    Major Concepts
        Biochemistry and Molecular Biophysics; Bioprocess Engineering; Cell
        Biology; Chemical Coordination and Homeostasis; Development; Infection;
        Pharmacology; Physiology; Public Health (Allied Medical Sciences)
    Chemicals & Biochemicals
IT
        SILVER; POLYPROPYLENE; AGAR
    Miscellaneous Descriptors
IT
       AGAR DIFFUSION TESTS; GROWTH INHIBITION; POLYPROPYLENE; VIABILITY LOSS
ORGN Classifier
       Bacteria
                   05000
     Super Taxa
       Microorganisms
     Organism Name
       bacteria
     Taxa Notes
       Bacteria, Eubacteria, Microorganisms
ORGN Classifier
       Fungi
                15000
     Super Taxa
       Plantae
     Organism Name
        fungi
        fungus
       yeast
     Taxa Notes
       Fungi, Microorganisms, Nonvascular Plants, Plants
```

ORGN Classifier

Microorganisms

01000

```
Super Taxa
       Microorganisms
    Organism Name
       microorganism
    Taxa Notes
        Microorganisms
RN
     7440-22-4 (SILVER)
       9003-07-0 (POLYPROPYLENE)
     9002-18-0 (AGAR)
L171 ANSWER 85 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
                    1994:498254 BIOSIS
ACCESSION NUMBER:
                    PREV199497511254
DOCUMENT NUMBER:
                    Effects of size of polythene bags and potting mixtures on
TITLE:
                    survival and growth of silver oak (Grevillea robusta
                    Parker) seedlings.
AUTHOR (S):
                    Misra, K. K.; Jaiswal, H. R.
                    Dep. Horticulture, G. B. Pant Univ. Agric. Technol.,
CORPORATE SOURCE:
                    Pantnagar, Nainital, India
                    Indian Forester, (1993) Vol. 119, No. 11, pp.
SOURCE:
                    941-943.
                    CODEN: IFORA8. ISSN: 0019-4816.
DOCUMENT TYPE:
                    Article
LANGUAGE:
                    English
                    Entered STN: 28 Nov 1994
ENTRY DATE:
                    Last Updated on STN: 12 Jan 1995
ED
     Entered STN: 28 Nov 1994
    Last Updated on STN: 12 Jan 1995
     Ecology: environmental biology - Plant
CC
     Development and Embryology - Morphogenesis
     Plant physiology - Nutrition 51504
     Plant physiology - Growth, differentiation
     Soil science - Physics and chemistry
     Forestry and forest products
                                    53500
IT
     Major Concepts
        Development; Ecology (Environmental Sciences); Forestry; Nutrition;
        Soil Science
     Chemicals & Biochemicals
TT
        POLYTHENE; SILVER
    Miscellaneous Descriptors
IT
        FORESTRY
     India (Asia, Oriental region)
GT
ORGN Classifier
                   26070
        Fagaceae
     Super Taxa
        Dicotyledones; Angiospermae; Spermatophyta; Plantae
     Organism Name
        Fagaceae
     Taxa Notes
        Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants
ORGN Classifier
                     26620
        Proteaceae
     Super Taxa
        Dicotyledones; Angiospermae; Spermatophyta; Plantae
     Organism Name
        Grevillea robusta
     Taxa Notes
        Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants
```

9002-88-4 (POLYTHENE)

RN

## 7440-22-4 (SILVER)

L171 ANSWER 86 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 1990:499798 BIOSIS

DOCUMENT NUMBER: PREV199090128144; BA90:128144

TITLE: A TEST METHOD FOR THE EVALUATION OF PROTECTIVE GLOVE MATERIALS USED IN AGRICULTURAL PESTICIDE OPERATIONS.

AUTHOR(S): EHNTHOLT D J [Reprint author]; CERUNDOLO D L; BODEK I;

SCHWOPE A D; ROYER M D; NIELSEN A P

CORPORATE SOURCE: ARTHUR D LITTLE INC, ACORN PARK, CAMBRIDGE, MASS 02140, USA

SOURCE: American Industrial Hygiene Association Journal, (

1990) Vol. 51, No. 9, pp. 462-468. CODEN: AIHAAP. ISSN: 0002-8894.

DOCUMENT TYPE: Article FILE SEGMENT: BA LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 5 Nov 1990

Last Updated on STN: 9 Jan 1991

ED Entered STN: 5 Nov 1990

Last Updated on STN: 9 Jan 1991

The ASTM Standard Test Method for Resistance of Protective Clothing AB Materials to Permeation by Liquids and Gases (F 739-85) and the recommended permeation cell have been modified to permit the testing of protective clothing materials for permeation by the low volatility, low water solubility active ingredients present in many pesticide formulations. The modification makes use of solid collection medium, a thin (0.02-in. thick) sheet of silicone rubber, to collect permeants. Those compounds permeating the protective material can then be desorbed into an appropriate solvent and analyzed using conventional methods and instruments. A series of permeation tests have been conducted using samples of 10 common, commercially available protective glove materials and the modified cell. Permeation of the active ingredient as well as carrier solvent components of several concentrated pesticide formulations containing low volatility, low water solubility active ingredients and aromatic hydrocarbon carrier solvents has been monitored. The relative breakthrough and the total mass of material permeating the glove materials appears to be strongly related to the concentration of the aromatic carrier solvent present in the formulations studied to date. The collection method was found to be less useful for monitoring the permeation of active ingredients, which have reasonably high water solubilities. The results obtained by using this method with samples of protective glove materials challenged by several concentrated pesticide formulations are described. For these formulations containing xylene boilbutyl rubber, and Silver Shield were most resistant to permeation; natural rubber and polyethylene glove materials were least resistant.

CC Methods - Laboratory methods 01004
Biochemistry studies - General 10060
Biochemistry studies - Minerals 10069
Chordate body regions - Extremities 11318
Integumentary system - Pathology 18506
Public health - Occupational health 37013
Pest control: general, pesticides and herbicides

IT Major Concepts

Biochemistry and Molecular Biophysics; Integumentary System (Chemical Coordination and Homeostasis); Methods and Techniques; Occupational Health (Allied Medical Sciences); Pest Assessment Control and Management

IT Miscellaneous Descriptors

AGRICHEMICAL PROTECTIVE CLOTHING AMERICAN SOCIETY FOR TESTING AND

MATERIALS ASTM STANDARD TEST METHOD SILICONE RUBBER NITRILE RUBBER BUTYL RUBBER SILVER SHIELD POLYETHYLENE OCCUPATIONAL HEALTH AND SAFETY 7440-22-4 (SILVER) RN

9002-88-4 (POLYETHYLENE)

L171 ANSWER 87 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

ACCESSION NUMBER:

1990:108624 BIOSIS

DOCUMENT NUMBER:

PREV199089058115; BA89:58115

TITLE:

OUALITY OF SILVER BANANA PREVIOUSLY STORED IN POLYETHYLENE BAGS AND RIPENED IN A ROOM WITH HIGH RELATIVE HUMIDITY 3.

ACIDITY SOLUBLE SOLIDS AND TANNINS.

AUTHOR (S):

CARVALHO H A D [Reprint author]; CHITARRA M I F; CARVALHO H

S D; CHITARRA A B; CARVALHO V D D

CORPORATE SOURCE:

CIENCIA ALIMENTOS, DEP FARMACOL EFOA, GABRIEL MONTEIRO 714,

CEP 37130 ALFENAS, MG

SOURCE:

Pesquisa Agropecuaria Brasileira, (1989) Vol. 24,

No. 5, pp. 495-502.

CODEN: PEABBT. ISSN: 0100-204X.

DOCUMENT TYPE:

Article

FILE SEGMENT:

RΑ

LANGUAGE:

PORTUGESE

ENTRY DATE:

Entered STN: 21 Feb 1990

Last Updated on STN: 21 Feb 1990

Entered STN: 21 Feb 1990 ED

Last Updated on STN: 21 Feb 1990

The purpose of the present work was to verify the influence of the AB relative humidity (RH) elevation of the ripening room upon the internal quality of silver banana previously packed in 110  $\mu$ -thickness polyethylene bags for 30 days. Analyses were made as to pH, titratable total acidity (TTA), total soluble solids (TSS), the total soluble solids (TSS)/titratable total acitivty (TTA) ratio and tanin content. The pH decreased from 5.1 in the green fruits to 4.4 in the ripe fruits, which corresponded to an increase in the TTA from 0.137%-0.192% to 0.257%-0.443% of malic acid. The TSS raised from 1.5%-2.1% in the green fruits to 19.4%-20.4% in the ripe ones, and the TSS/TTA ratio varied from 10.33%-13.54% in the green fruits to 45.94-77.19 in the ripe ones. The total tannin content decreased from 241.99-276.68 mg/100 g in the green fruits to 98.09-112.78 mg/100 g in the ripe ones.

Biochemistry studies - General 10060

External effects - Humidity 10620 Food technology - Fruits, nuts and vegetables

Food technology - Evaluations of physical and chemical properties

Food technology - Preparation, processing and storage

Plant physiology - Chemical constituents 51522

Horticulture - Tropical, subtropical fruits and plantation crops

IT Major Concepts

Biochemistry and Molecular Biophysics; Foods

Miscellaneous Descriptors TT

PLANT FRUITS

ORGN Classifier

Musaceae 25365

Super Taxa

Monocotyledones; Angiospermae; Spermatophyta; Plantae

Taxa Notes

Angiosperms, Monocots, Plants, Spermatophytes, Vascular Plants

7440-22-4 (SILVER)

9002-88-4 (POLYETHYLENE)

L171 ANSWER 88 OF 103 BIOSIS CORYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 1988:29299 BIOSIS

PREV198885017024; BA85:17024 DOCUMENT NUMBER:

INVESTIGATIONS ON THE ADHERENCE OF ORAL MICROORGANISMS TO TITLE: PROSTHETIC MATERIALS AND THE REMOVAL OF IN-VITRO PLAQUE.

YOSHIMURA K [Reprint author] AUTHOR (S):

GRAD SCH DENT, THIRD DEP PROSTHODONTICS, OSAKA DENT UNIV, CORPORATE SOURCE:

1-47 KYOBASHI, HIGASHI-KU, OSAKA 540, JPN

Shika Igaku, (1987) Vol. 50, No. 3, pp. 287-333. SOURCE:

CODEN: SIGAAE. ISSN: 0030-6150.

DOCUMENT TYPE: Article

FILE SEGMENT: BA

JAPANESE LANGUAGE:

Entered STN: 28 Dec 1987 ENTRY DATE:

Last Updated on STN: 28 Dec 1987

Entered STN: 28 Dec 1987 ED

Last Updated on STN: 28 Dec 1987

The present study was performed to clarify the interaction between denture AΒ base materials and oral microorganisms with the goal of developing a denture base coating material, and to evaluate, using the same techniques, the possibility of applying a high polymer film material to retard plaque accumulation. In addition, denture cleansing methods were studied. Bacterial strains used were Streptococcus mutans, Actinomyces viscosus, Bacteroides gingivalis and Candida albicans. The prosthetic materials resin, silver-palladium-gold alloy and titanium were used. The polymer films polyvinylalcholol (POV), nylon 6 (ON), polyethyleneterephthalate (PET), polyethylene (PE), polypropylene (CPP) and polyethylenetetrafluoroethylene (ETFE) were examined. The results obtained were as follows: The quantity of in vitro plaque produced on titanium and silver-palladium-gold alloy by S. mutans or A. viscosus in media with sucrose was less than that on resin, ETFE had the least amount of in vitro plaque. In vitro plaque produced by S. mutans showed no difference in its plaque-retaining capacity on prosthetic materials. plaque-retaining capacity on polymer films was less than that on prosthetic materials. The effect on removal of in vitro plaque using denture cleansers was different for the various oral microorganisms examined. The above results suggest that there is no difference in plaque retention among the prosthetic materials tested and that some polymer film materials can possibly be used as coating material for retarding plaque accumulation on denture bases.

CC Biochemistry studies - General 10060

10502

Biophysics - General 10502 Biophysics - Bioengineering

Dental biology - General and methods Dental biology - Pathology 19006 19001

Bacteriology, general and systematic 30000

Physiology and biochemistry of bacteria 31000

Medical and clinical microbiology - Bacteriology 36002

Major Concepts IT

Dental and Oral System (Ingestion and Assimilation); Infection; Methods and Techniques; Physiology; Systematics and Taxonomy

Miscellaneous Descriptors IT

STREPTOCOCCUS-MUTANS ACTINOMYCES-VISCOSUS BACTEROIDES-GINGIVALIS CANDIDA-ALBICANS DENTURE BASE MATERIALS SILVER-PALLADIUM-GOLD ALLOY

TITANIUM POLYMER FILMS POLYVINYLALCOHOL NYLON 6 POLYETHYLENETEREPHTHALATE POLYETHYLENE POLYPROPYLENE

POLYETHYLENETETRAFLUOROETHYLENE PLAQUE RETAINING CAPACITY

ORGN Classifier

Bacteroidaceae 06901

Super Taxa

E. Arnold 10/825,930 Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms Taxa Notes Bacteria, Eubacteria, Microorganisms ORGN Classifier Gram-Positive Cocci 07700 Super Taxa Eubacteria; Bacteria; Microorganisms Taxa Notes Bacteria, Eubacteria, Microorganisms ORGN Classifier Irregular Nonsporing Gram-Positive Rods Super Taxa Actinomycetes and Related Organisms; Eubacteria; Bacteria; Microorganisms Taxa Notes Bacteria, Eubacteria, Microorganisms ORGN Classifier Fungi Imperfecti or Deuteromycetes 15500 Super Taxa Fungi; Plantae Taxa Notes Fungi, Microorganisms, Nonvascular Plants, Plants 7440-22-4 (SILVER) RN 7440-05-3 (PALLADIUM) 7440-57-5 (GOLD) 7440-32-6 (TITANIUM) 9002-89-5 (POLYVINYLALCOHOL) 25038-54-4 (NYLON 6) 25038-59-9 (POLYETHYLENETEREPHTHALATE) 9002-88-4 (POLYETHYLENE) 9003-07-0 (POLYPROPYLENE) L171 ANSWER 83 (0) 103 PBIOSIS GOPYRIGHT (c) 2006 The Thomson Corporation on STN 1983:266960 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV198376024452; BA76:24452 TITLE: A CLINICAL STUDY OF ANTI MICROBIAL AGENTS DELIVERED TO BURN WOUNDS FROM A DRUG LOADED SYNTHETIC DRESSING. AUTHOR (S): NATHAN P [Reprint author]; ROBB E C; LAW E J; MACMILLAN B G CORPORATE SOURCE: CELL BIOL AND IMMUNOLOGY, SHRINERS BURNS INST, 202 GOODMAN ST, CINCINNATI, OH 45219, USA SOURCE: Journal of Trauma, 1982 Vol. 22, No. 12, pp. 1015-1018. CODEN: JOTRAS. ISSN: 0022-5282. Article DOCUMENT TYPE: FILE SEGMENT: BA LANGUAGE: **ENGLISH** The release of antimicrobial agents from a solid barrier dressing when applied to 2nd- and 3rd-degree burn wounds was investigated. The

synthetic dressings were formed by a mixture of polyethylene glycol-400 (PEG), poly-2-hydroxethyl methacrylate (PHEMA) and 1 of the test drugs: silver sulfadiazine (AgSD), gentamicin, silver nitrate or nitrofurazone. The dressings were formed directly on the burn wounds of 33 patients from a paste prepared from a mixture of PEG-PHEMA and drug. These dressings remained in place for 3 days, covering 12-64 in.2 of the wound. patients, the entire burn wounds were covered with the dressings: the treated areas were .apprx. 200 in.2. The use of drug-loaded synthetic dressings extended to cover major portions of the burn wounds reduced the work required for nursing care and lessened patient discomfort.

CC Biochemistry studies - General 10060

E. Arnold 10/825,930 Biochemistry studies - Carbohydrates Biochemistry studies - Minerals 10069 External effects - Temperature as a primary variable - hot Pathology - Therapy 12512 Pharmacology - General 22002 Pharmacology - Clinical pharmacology 22005 Temperature - Thermopathology 23007 Medical and clinical microbiology - General and methods 36001 Public health - Health services and medical care Chemotherapy - General, methods and metabolism Major Concepts Infection; Pathology; Pharmacology Miscellaneous Descriptors PATIENTS POLY ETHYLENE GLYCOL 400 POLY-2 HYDROXYETHYL METHACRYLATE SILVER SULFADIAZINE GENTAMICIN SILVER NITRATE NITROFURAZONE ANTIINFECTIVE LESSENED DISCOMFORT ORGN Classifier Microorganisms 01000 Super Taxa Microorganisms Taxa Notes Microorganisms ORGN Classifier Hominidae 86215 Super Taxa Primates; Mammalia; Vertebrata; Chordata; Animalia Taxa Notes Animals, Chordates, Humans, Mammals, Primates, Vertebrates 25322-68-3 (POLYETHYLENE GLYCOL) 25249-16-5 (POLY-2-HYDROXYETHYL METHACRYLATE) 22199-08-2 (SILVER SULFADIAZINE) 1403-66-3 (GENTAMICIN) 7761-88-8 (SILVER NITRATE) 59-87-0 (NITROFURAZONE) 9002-88-4 (POLY ETHYLENE) L171 ANSWER 90 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN 1982:35160 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV198222035160; BR22:35160 EXTRANEOUS ADDITIONS DURING SAMPLING FOR TRACE ELEMENT TITLE: ANALYSES AND RESULTS OF DETERMINATION IN SERUM OF HEALTH SUBJECTS. VERSIECK J [Reprint author]; DE RUDDER J; HOSTE J; BARBIER AUTHOR(S): DEP INTERNAL MED, DIV GASTROENTEROL, UNIV GHENT, BELG CORPORATE SOURCE: Proceedings of University of Missouri's Annual Conference SOURCE: on Trace Substances in Environmental Health, (1980 ) Vol. 14, pp. 315-328. Meeting Info.: 14TH ANNUAL CONFERENCE ON TRACE SUBSTANCES IN ENVIRONMENTAL HEALTH, COLUMBIA, MO., USA, JUNE 2-5, 1980. PROC UNIV MO ANNU CONF TRACE SUBST ENVIRON HEALTH. CODEN: PUMTAG. ISSN: 0361-5162. Conference; (Meeting)

DOCUMENT TYPE:

FILE SEGMENT: RP LANGUAGE: ENGLISH

IT

IT

RN

General biology - Symposia, transactions and proceedings 00520

Methods - Laboratory methods 01004 Methods - Laboratory apparatus 01006

Clinical biochemistry - General methods and applications 10006

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Biochemistry methods - Minerals
     Biochemistry studies - Minerals
                                        10069
     Digestive system - General and methods
                                               14001
     Blood - Blood and lymph studies
                                        15002
     Toxicology - General and methods
                                         22501
     Major Concepts
TΤ
        Biochemistry and Molecular Biophysics; Clinical Chemistry (Allied
        Medical Sciences); Equipment, Apparatus, Devices and Instrumentation;
        Methods and Techniques; Toxicology
ΙT
     Miscellaneous Descriptors
        CHROMIUM MANGANESE IRON COBALT NICKEL COPPER ZINC SILVER POLY ETHYLENE
        POLY PROPYLENE CONTAINERS LIVER NEEDLE BIOPSY ARTIFACTS
ORGN Classifier
        Hominidae
                    86215
     Super Taxa
        Primates; Mammalia; Vertebrata; Chordata; Animalia
     Taxa Notes
        Animals, Chordates, Humans, Mammals, Primates, Vertebrates
     7440-47-3 (CHROMIUM)
RN
     7439-96-5 (MANGANESE)
     7439-89-6 (IRON)
     7440-48-4 (COBALT)
     7440-02-0 (NICKEL)
     7440-50-8 (COPPER)
     7440-66-6 (ZINC)
       7440-22-4 (SILVER)
       9002-88-4 (POLYETHYLENE)
       9003-07-0 (POLYPROPYLENE)
L171 ANSWER 91 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
     STN"
ACCESSION NUMBER:
                    1981:146572 BIOSIS
DOCUMENT NUMBER:
                    PREV198171016564; BA71:16564
                    SOLAR DRYING OF SILVER JEW FISH JOHNIUS-ARGENTATUS IN
TITLE:
                    POLYTHENE TENT DRIER.
                    AHMED A T A [Reprint author]; MUSTAFA G; RAHMAN M H
AUTHOR(S):
                    DEP ZOOL, UNIV DACCA, BANGLADESH
CORPORATE SOURCE:
SOURCE:
                    Bangladesh Journal of Biological Sciences, (1979) 7
                    Vol. 8, No. 1, pp. 23-30.
                    ISSN: 1016-4057.
DOCUMENT TYPE:
                    Article
FILE SEGMENT:
                    BA
LANGUAGE:
                    ENGLISH
     Solar drying of the Silver Jew fish, J. argentatus, in polythene tent
     drier was carried out to determine the advantages over the traditional
     sun-drying method. The polythene tent drier was effective to control fly larvae infestation. The rate of drying was slightly higher within the
     polythene drier. Fish dried in the polythene drier contained an increased
     percentage of protein and fat compared to fish dried by the traditional
     sun-drying method.
     Radiation biology - General
                                    06502
     Radiation biology - Radiation and isotope techniques
                                                              06504
     Radiation biology - Radiation effects and protective measures
     Ecology: environmental biology - Water research and fishery biology
     07517
     Comparative biochemistry
                                 10010
     Biochemistry methods - General
                                       10050
     Biochemistry studies - General 10060
     Biochemistry studies - Proteins, peptides and amino acids
     Biochemistry studies - Lipids
                                     10066
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Biophysics - Molecular properties and macromolecules
                                                               10506
     External effects - Light and darkness
     Nutrition - Lipids
                           13222
     Nutrition - Proteins, peptides and amino acids
     Food technology - Fish and other marine and freshwater products
     Food technology - Evaluations of physical and chemical properties
     Food technology - Preparation, processing and storage
     Development and Embryology - Morphogenesis
     Invertebrata: comparative, experimental morphology, physiology and
     pathology - Insecta: general
                                     64072
IT
     Major Concepts
        Foods
IT
     Miscellaneous Descriptors
        FLY LARVAE INFESTATION CONTROL PROTEIN FAT
ORGN Classifier
        Diptera
                   75314
     Super Taxa
        Insecta; Arthropoda; Invertebrata; Animalia
     Taxa Notes
        Animals, Arthropods, Insects, Invertebrates
ORGN Classifier
        Osteichthyes
                        85206
     Super Taxa
        Pisces; Vertebrata; Chordata; Animalia
     Taxa Notes
        Animals, Chordates, Fish, Nonhuman Vertebrates, Vertebrates
     7440-22-4 (SILVER)
ΡN
       9002-88-4 (POLYTHENE)
L171 ANSWER 92 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
     STN
                     1978:189094 BIOSIS
ACCESSION NUMBER:
                     PREV197866001591; BA66:1591
DOCUMENT NUMBER:
                     A NOTE ON THE GROWTH OF 2 EXOTICS IN ENGLAND THE SILVER
TITLE:
                     CARP HYPOPHTHALMICHTHYS-MOLITRIX AND THE BIGHEAD
                     ARISTICHTHYS-NOBILIS.
                     STOTT B [Reprint author]; BUCKLEY B R
AUTHOR(S):
                     SALMON FRESHW FISH LAB, MINIST AGRIC FISH FOOD, LONDON SW1A
CORPORATE SOURCE:
                     2HH, ENGL, UK
                     Journal of Fish Biology, (1978) Vol. 12, No. 1,
SOURCE:
                     pp. 89-92.
                     CODEN: JFIBA9. ISSN: 0022-1112.
                     Article
DOCUMENT TYPE:
FILE SEGMENT:
                     ENGLISH
LANGUAGE:
AB
     Observations were made on the growth of microphagous silver carp and
     bigheads in a tank housed under a horticultural polythene tunnel. These
     species may be of interest for cultivation and might also be useful in
     removing nutrients from eutrophic waters in the United Kingdom.
     Ecology: environmental biology - Animal 07508
Ecology: environmental biology - Wildlife management: aquatic 0752
Ecology: environmental biology - Water research and fishery biology
CC
     07517
     Biochemistry studies - General
                                        10060
     Physiology - General
                             12002
     Development and Embryology - Morphogenesis
     Public health - Air, water and soil pollution
                                                        37015
TT
     Major Concepts
        Development; Ecology (Environmental Sciences); Pollution Assessment
        Control and Management; Wildlife Management (Conservation)
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E. Arnold 10/825,930
    Miscellaneous Descriptors
TT
        HORTICULTURAL POLY ETHYLENE TUNNEL CULTIVATION NUTRIENT EUTROPHICATION/
ORGN Classifier
        Osteichthyes
                       85206
     Super Taxa
        Pisces; Vertebrata; Chordata; Animalia
        Animals, Chordates, Fish, Nonhuman Vertebrates, Vertebrates
     7440-22-4 (SILVER)
RN
       9002-88-4 (POLY ETHYLENE)
L171 ANSWER 93 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
     STN
ACCESSION NUMBER:
                    1971:194391 BIOSIS
                    PREV197152104391; BA52:104391
DOCUMENT NUMBER:
                    RELATIVE RESPONSE OF DOSIMETERS TO COBALT-60 AND 25 NANO
TITLE:
                    SECONDS PULSED ELECTRON IRRADIATIONS.
                    MARTIN J A; JONES J L; OREHOTSKY R S
AUTHOR (S):
                    Health Physics, (1971) Vol. 20, No. 3, pp.
SOURCE:
                    267-275.
                    CODEN: HLTPAO. ISSN: 0017-9078.
                    Article
DOCUMENT TYPE:
FILE SEGMENT:
                    BA
LANGUAGE:
                    Unavailable
    Radiation biology - Radiation and isotope techniques
     Radiation biology - Radiation effects and protective measures
                                                                     06506
     Biochemistry studies - General
                                      10060
     Biochemistry studies - Minerals
     Biophysics - Methods and techniques
                                           10504
     External effects - Pressure
                                   10606
IT
    Major Concepts
        Radiation Biology; Radiology (Medical Sciences)
IT
    Miscellaneous Descriptors
        POLY ETHYLENE CELLOPHANE CELLULOSE ACETATE POLY VINYL CHLORIDE POLY
        VINYLIDENE CHLORIDE COBALT GLASS HIGH Z SILVER ACTIVATED PHOSPHATE
        GLASS PLATES
     10198-40-0 (COBALT-60)
RN
```

9002-88-4 (POLY ETHYLENE)

9004-35-7 (CELLULOSE ACETATE)

9002-86-2 (POLY VINYL CHLORIDE)

9002-85-1 (POLY VINYLIDENE CHLORIDE)

7440-48-4 (COBALT)

7440-22-4 (SILVER)

14265-44-2 (PHOSPHATE)

9005-81-6 (CELLOPHANE)

L171 ANSWER 94 OF 103 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:83881 BIOSIS

DOCUMENT NUMBER: PREV199900083881

TITLE: Comparisons of contact lens, foil, fiber and skin

electrodes for patterns electroretinograms.

AUTHOR (S): McCulloch, Daphne L. [Reprint author]; Van Boemel, Gretchen

B.; Borchert, Mark S.

Dep. Vision Sci., Glasgow Caledonian Univ., Cowcaddens CORPORATE SOURCE:

Road, Glasgow G4 0BA, UK

Documenta Ophthalmologica, (1997 (1998)) Vol. 94, SOURCE:

No. 4, pp. 327-340. print.

CODEN: DOOPAA. ISSN: 0012-4486.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 1 Mar 1999

Last Updated on STN: 1 Mar 1999

Entered STN: 1 Mar 1999

Last Updated on STN: 1 Mar 1999

Pattern electroretinograms are small physiologic signals that require good AB patient cooperation and long recording times, particularly when conditions are not optimal. Six electrodes were compared to evaluate their efficacy. Pattern electroretinograms were recorded in eight healthy volunteers to high-contrast, pattern-reversal checks (40' width) with Burian-Allen, DTL fiber, C-glide, gold foil, HK loop and skin electrodes. Raw data for 320 reversals were analyzed off-line to evaluate signal amplitude, quality, P50 and N95 peak times, artifact rate and electrical noise. Insertion time, impedance and subjective comfort were also assessed. The Burian-Allen contact lens electrode gave the largest signal and lowest impedance but was the least comfortable and had the highest artifact rate (p < 0.01). A skin electrode on the lower eyelid produced the smallest pattern electroretinogram with the poorest quality (p < 0.05). The four other electrodes were foil or fiber electrodes in contact with the tear film, conjunctiva and/or the inferior cornea. The signal from these showed only minor differences. When electrodes are compared for pattern electroretinogams recording, the foil and fiber electrodes do not differ substantially but contact lens and skin electrodes show substantial disadvantages.

Sense organs - General and methods 20001 CC

IT Major Concepts

Equipment, Apparatus, Devices and Instrumentation; Sense Organs (Sensory Reception)

Methods & Equipment IT

pattern electroretinography: artifact rate, electrical noise, evaluation method, signal quality, signal amplitude, peak time

Miscellaneous Descriptors IT

gold foil electrode: comfort, gold-coated Mylar foil, comparison, efficiency; skin electrode: comfort, silver/silver chloride, lower eyelid attachment, comparison, efficiency; Burian-Allen bipolar contact lens electrode: comfort, efficiency, comparison; C-glide electrode: carbon fiber, comfort, efficiency, comparison; DTL fiber electrode: comfort, silver impregnated fiber, efficiency, comparison; HK-loop electrode: comfort, comparison, silver wire loop, efficiency

ORGN Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

human

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

7440-22-4 (SILVER) RN

7440-44-0 (CARBON)

7440-57-5 (GOLD)

7783-90-6 (SILVER CHLORIDE)

25038-59-9 (MYLAR)

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on STN DUPLICATE 6

ACCESSION NUMBER: 2003-0496301 PASCAL

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reserved.

TITLE (IN ENGLISH): γ-Radiation synthesis of silver-

polystyrene and cadmium sulfide-

polystyrene nanocomposite microspheres

DAZHEN WU; XUEWU GE; YUHONG HUANG; ZHICHENG ZHANG; AUTHOR:

Department of Polymer Science and Engineering, CORPORATE SOURCE:

University of Science and Technology of China, Hefei,

Anhui 230026, China

Materials letters : (General ed.), (2003), SOURCE:

57(22-23), 3549-3553, 22 refs.

ISSN: 0167-577X CODEN: MLETDJ

DOCUMENT TYPE: Journal Analytic BIBLIOGRAPHIC LEVEL: Netherlands COUNTRY: LANGUAGE: English

AVAILABILITY: INIST-19369, 354000111327440430

UP 20031208

Silver-polystyrene and cadmium sulfide-AB

polystyrene nanocomposite microspheres were fabricated by  $\gamma$ -ray irradiation. Dispersion polymerization induced by  $\gamma$ -ray irradiation was exploited to prepare monodispersed polystyrene microspheres. Silver (Ag

) and cadmium sulfide (CdS) nanoparticles were generated on the

polystyrene microsphere surface via subsequent reduction of Ag.sup.+ by  $\gamma$ -ray irradiation, as well as by precipitation reaction of Cd.sup.2.sup.+ and S.sup.2.sup.-, which was

released from the decomposition of Na.sub.2S.sub.2O.sub.3 upon  $\gamma$ -ray irradiation. The products were characterized by transmission electron microscopy (TEM) and X-ray diffraction (XRD) analysis. The TEM images demonstrate that well-dispersed silver (.eqvsim. 11 nm)

and cadmium sulfide nanoparticles (.eqvsim. 23 nm) were attached to the surface of polystyrene microspheres (.eqvsim. 380 nm).

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ACCESSION NUMBER:

2002-0438362 PASCAL

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TITLE (IN ENGLISH):

Effect of plasticizers on the formation of

silver nanoparticles in

polymer electrolyte membranes for

olefin/paraffin separation

AUTHOR:

JOSE Binoy; JAE HEE RYU; YONG JIN KIM; HONGGON KIM;

YONG SOO KANG; SANG DEUK LEE; HOON SIK KIM

CORPORATE SOURCE:

CFC Alternatives Research Center, Korea Institute of

Science and Technology, 39-1, Hawolgokdong,

Seongbukgu, Seoul 136-791, Korea, Republic of; Center for Facilitated Transport Membrane, Korea Institute of

Science and Technology, 39-1, Hawolgokdong, Seongbukgu, Seoul 136-791, Korea, Republic of

Chemistry of materials, (2002), 14(5), SOURCE:

2134-2139, 27 refs.

ISSN: 0897-4756

DOCUMENT TYPE: BIBLIOGRAPHIC LEVEL:

Journal Analytic United States

LANGUAGE:

COUNTRY:

English

AVAILABILITY:

INIST-21957, 354000108334820320

UP 20020916

The effect of plasticizers such as dioctyl phthalate, diphenyl phthalate, AB dioctyl terephthalate, ethylene carbonate, glycerol, and sucrose on the

performance and stability of polymer electrolyte membranes consisting of AqBF.sub.4 and poly(vinylpyrrolidone) (PVP) or poly(2ethyl-2-oxazoline) (POZ) has been investigated for the separation of propylene/propane gas mixtures. The mixed gas permeances and selectivities for propylene over propane on AqBF.sub.4-PVP and AqBF.sub.4-POZ membranes without a plasticizer continuously decreased with time due to the reduction of silver ions in the membrane.

Reduction of silver ions to silver

nanoparticles in AqBF.sub.4-PVP membrane was confirmed by transmission electron microscopic (TEM) analysis. Among the plasticizers tested, the presence of dioctyl or diphenyl phthalate was found to improve the stability and performance of the membranes significantly. On the other hand, the performance of the membranes containing glycerol or sucrose as a plasticizer rapidly deteriorated even faster than that of the membranes without a plasticizer. TEM analysis of the membranes shows that the rate of silver nanoparticle formation is greatly reduced by the addition of a phthalate, but accelerated by the

presence of glycerol.

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ACCESSION NUMBER: PASCAL 1998-0307165

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reserved.

TITLE (IN ENGLISH): In-situ formation of Ag-containing

nanoparticles in thin polymer films

FRITZSCHE W.; PORWOL H.; WIEGAND A.; BORNMANN S.; AUTHOR:

KOEHLER J. M.

CORPORATE SOURCE: Institute of Physical High Technology, P.O. Box 100

239, 07702 Jena, Germany, Federal Republic of

Nanostructured materials, (1998), 10(1), SOURCE:

89-97, 7 refs.

ISSN: 0965-9773

DOCUMENT TYPE: Journal Analytic BIBLIOGRAPHIC LEVEL:

COUNTRY: United Kingdom

LANGUAGE: English

AVAILABILITY: INIST-22625, 354000076897980100

IJΡ 20001101

A polymeric material containing Ag AΒ nanoparticles was formed by thermal annealing ofsilver nitrate

dissolved in a polymer. Polyvinylalcohol andpolyvinylpyrrolidone were used as polymer matrix. The composite material was prepared as thin films by spin coating. UV/ VIS spectroscopy was used to monitor the preparation. The formation of a sharp band at -425 nm in the UV/VIS-spectra and ultrastructural changes (as revealed by SEM and SFM)

indicated the generation of nanoparticles.

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on STN

ACCESSION NUMBER: 2002-0360615 PASCAL

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reserved.

TITLE (IN ENGLISH): Nanostructured silver/polystyrene

composite film: Preparation and ultrafast third-order

optical nonlinearity

RONG ZENG; SHU FENG WANG; HAI CHUN LIANG; MIN ZHI **AUTHOR:** 

RONG; MING QIU ZHANG; HAN MIN ZENG; QI HUANG GONG

CORPORATE SOURCE: Key Laboratory for Polymeric Composite and Functional

Materials of Ministry of Education, Zhongshan

## E. Arnold 10/825,930

University, Guangzhou 510275, China; Materials Science Institute, Zhongshan University, Guangzhou 510275, China; Department of Physics, Mesoscopic Physics Laboratory, Peking University, Beijing 100871, China

SOURCE:

Polymers & polymer composites, (2002),

10(4), 291-298, 26 refs.

ISSN: 0967-3911

DOCUMENT TYPE: BIBLIOGRAPHIC LEVEL:

Journal Analytic

COUNTRY:

United Kingdom

LANGUAGE:

English

AVAILABILITY:

INIST-21856, 354000101027970040

UP 20020723

AB Surface-modified silver nanoparticles with various sizes, synthesized by water-in-oil micro-emulsion, were incorporated into polystyrene (PS) to form transparent nanocomposite films through solution-mixing and static-casting. It was found that the Ag nanoparticles could be re-dispersed well in the polymer matrix by using chloroform as a solvent due to a strong interaction between Ag and chloroform. XPS analysis suggested that there is no obvious interaction between nanosilver and the polystyrene matrix. The third-order nonlinear optical susceptibility of Ag /PS nanocomposite films is around .sub.1.sub.0esu and increases with increasing particle size, as measured by the time-resolved femtosecond optical Kerr effect experiment at a wavelength of 830nm. The results

L171 ANSWER 99 OF 103 JICST-EPlus COPYRIGHT 2006 JST on STN

ACCESSION NUMBER:

1030609073 JICST-EPlus

the structure and properties of the nanocomposites.

TITLE:

Optical Properties and Device Applications of

demonstrate that the present fabrication approach can effectively tailor

Polymer Films Containing Gold or Silver

Nanoparticles

AUTHOR:

NIIDOME YASURO; YAMADA SUNAO

CORPORATE SOURCE:

SOURCE:

Kyushu Univ., Graduate School of Engineering, JPN Nippon Shashin Gakkaishi (Journal of the Society of

Photographic Science and Technology of Japan), (2003) vol. 66, no. 4, pp. 349-354. Journal Code: G0165A (Fig. 14, Ref.

CODEN: NSGKAP; ISSN: 0369-5662

PUB. COUNTRY:

Japan

DOCUMENT TYPE:

Journal; Commentary

LANGUAGE:

Japanese

STATUS:

New

Gold or silver nanoparticles have characteristic

absorption bands in the ultraviolet - near infrared region due to surface plasmon oscillation of free electrons. Thus, they show clear colors such as blue and red. Spectroscopic properties of those nanoparticles depend on the morphology of the single particle as well as the agglomerates. Recently, various methods for the preparation of nanoparticle-doped thin films have been developed, and their optical applications have been increasing interests. In this article, preparation and dichroic properties of gold- or silver-nanoparticle-doped films are described, together with some photonics applications. (author abst.)

L171 ANSWER 100 OF 103 JICST-EPlus COPYRIGHT 2006 JST on STN

ACCESSION NUMBER: 1010960281 JICST-EPlus

TITLE:

Preparation of silver coated PE particles and

measurement of their dielectric constants aiming at high

performance ER suspensions.

AUTHOR: TERUI YOSHITOMO; NAKAJIMA YOJI; SHINOHARA KUNIO

CORPORATE SOURCE: Hokkaido Univ., Fac. of Eng.

SOURCE: Seidenki Gakkai Koen Ronbunshu, (2001) vol. 2001, pp.

105-108. Journal Code: F0983B (Fig. 7, Tbl. 3, Ref. 4)

ISSN: 1342-1492

PUB. COUNTRY: Japan

DOCUMENT TYPE: Conference; Short Communication

LANGUAGE: Japanese STATUS: New

AB High dielectric constant, low density, and spherically shaped particles are recommended for electrorheological(ER) suspensions. We focus our attention on composite particles (e.g., plastic particles covered with metal). This time we intend to prepare such particles with a machine named the hybridizer, in which high speed rotating blades hit particles to fixate fine silver powder on polyethylene(PE)

particle surface. The dielectric constant of the composite particles in silicone oil was measured on the basis of Rayleigh's equation. In our measurements, a pronounced non-linear relationship between the capacitance change and the volume fraction of particles in the suspension was found to make the calculated dielectric constant unreliable. We extrapolated the measured values to zero concentration to obtain reasonable values for the dielectric constant of the composite particles. The highest dielectric constant of the composite particles thus obtained so far was 30 with a density of 1.14q/ml. (author abst.)

L171 ANSWER 101 OF 103 JICST-EPlus COPYRIGHT 2006 JST on STN

ACCESSION NUMBER: 980675074 JICST-EPlus

TITLE: Preparation and Catalysis of Silver

Nanoparticles.

AUTHOR: SHIRAISHI YUKIHIDE; TOSHIMA NAOKI CORPORATE SOURCE: Science Univ. of Tokyo in Yamaguchi

SOURCE: Nippon Kagakkai Koen Yokoshu, (1998) vol. 74th, no. 1, pp.

632. Journal Code: S0493A

ISSN: 0285-7626

PUB. COUNTRY: Japan LANGUAGE: Japanese STATUS: New

AB Interests in the nanoscopic materials and their application to catalyses have greatly stimulated the research on metal clusters. We recently reported that nanoscopic silver particles protected with poly(N-viny1-2-

pyrrolidone) (PVP) were prepared by ethanol-reduction of

silver perchlorate. Silver nanoparticles

protected with sodium polyacrylate (PAA) were also prepared by tetrahydroborate reduction. Oxidation of ethylene catalyzed by

polymer-protected silver nanoparticles was

performed in ethanol/water (1/1 v/v) at 90-95.DEG.C. under latm of ethylene/oxygen (2/1). Products were analyzed with gas chromatography,

being identified to be ethyleneoxide. The silver

nanoparticles thus prepared for oxidation of ethylene have the

higher catalytic activity than commercial silver catalysts. (author abst.)

L171 ANSWER 102 OF 103 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation

on STN

ACCESSION NUMBER: 2000:902953 SCISEARCH

THE GENUINE ARTICLE: 375QD

TITLE: In situ spectroscopic and microscopic study on dispersion

of Ag nanoparticles in polymer

thin films

AUTHOR: Akamatsu K; Tsuboi N; Hatakenaka Y; Deki S (Reprint)
CORPORATE SOURCE: Kobe Univ, Fac Engn, Dept Chem Sci & Engn, Nada Ku, Kobe,

Hyogo 6578501, Japan (Reprint); Kobe Univ, Grad Sch Sci &

Technol, Nada Ku, Kobe, Hyogo 6578501, Japan

COUNTRY OF AUTHOR: Japan

JOURNAL OF PHYSICAL CHEMISTRY B, (9 NOV 2000) SOURCE:

Vol. 104, No. 44, pp. 10168-10173.

ISSN: 1089-5647.

AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 PUBLISHER:

USA.

Article; Journal DOCUMENT TYPE:

English LANGUAGE: 30 REFERENCE COUNT:

Entered STN: 2000 ENTRY DATE:

Last Updated on STN: 2000

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

ED Entered STN: 2000

Last Updated on STN: 2000

The dispersion process of Ag nanoparticles into AΒ vapor-deposited nylon 11 thin films caused by heat treatment has been investigated. In situ optical transmission and Fourier transform infrared (FT-IR) reflection absorption spectroscopy were used independently for characterizing the changes in the surface plasmon resonance response of Ag nanoparticles and in the thermal behavior of the nylon 11 matrix during heat treatment, respectively. The peak wavelength of the plasmon band was observed to shift to shorter wavelength in the temperature range 40-80 degreesC. The infrared temperature study revealed that the as-deposited nylon 11 matrix is thermodynamically metastable and semicrystalline, including hydrogen-bonded small crystallites. These relaxed upon heat treatment above 40 degreesC, at which the Ag nanoparticles penetrated from the surface into the bulk phase of the matrix; These results demonstrate that there is a strong correlation between the optical spectral features, dispersion state of the particles, and structural change of the polymer matrix. Dispersion mechanism is discussed in terms of the surface free energy of Ag nanoparticles, which is reduced upon embedding in the polymer matrix.

L171/ANSWER 103\_OF 103\_SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:838869 SCISEARCH

THE GENUINE ARTICLE: 369QC

Preparation, microscopy, and flow cytometry with TITLE:

excitation into surface plasmon resonance bands of gold or

silver nanoparticles on

aminodextran-coated polystyrene beads

AUTHOR: Siiman O (Reprint); Burshteyn A

CORPORATE SOURCE:

Beckman Coulter Inc, Adv Technol, 11800 SW 147th Ave, Miami, FL 33196 USA (Reprint); Beckman Coulter Inc, Adv

Technol, Miami, FL 33196 USA; Beckman Coulter Inc,

Reagents Applicat & Dev, Miami, FL 33196 USA

COUNTRY OF AUTHOR:

SOURCE: JOURNAL OF PHYSICAL CHEMISTRY B, (26 OCT 2000)

Vol. 104, No. 42, pp. 9795-9810.

ISSN: 1520-6106.

AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 PUBLISHER:

USA.

DOCUMENT TYPE:

Article; Journal

LANGUAGE:

English

REFERENCE COUNT:

58

ENTRY DATE:

Entered STN: 2000

Last Updated on STN: 2000 \*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

ED Entered STN: 2000

AΒ

Last Updated on STN: 2000

Spherical polystyrene latex beads of about 2.0 mum diameter were coated with islands of silver or gold metal, about 5-200 nm in diameter, by reduction of aqueous silver or gold ions in the presence of sugar-coated polystyrene latex beads. The metal islands are held on the bead surface by a polymeric sugar derivative, aminodextran, covalently bound to the polystyrene aldehyde/sulfate bead. Images of the gold or silver nanoparticle-coated polystyrene beads, obtained with an optical microscope, show that gold, silver , and uncoated polystyrene beads can be distinguished by their different colors, red-purple, black, and colorless, respectively. Also, scanning electron micrographs of coated versus uncoated polystyrene beads show a distinct granular bead surface when metal nanostructures are present versus a smooth bead surface when they are absent. Nanoparticles of gold greater than about 50 nm in diameter on polystyrene beads showed enhanced 90 degrees or side light scatter (resonant Rayleigh scattering) with excitation at 633 nm but no enhancement (same light scatter intensity as uncoated polystyrene beads) at excitation wavelengths of 544, 488, and 458 nm. On the other hand, nanoparticles of silver greater than about 50 nm in diameter on polystyrene beads showed enhanced 90 degrees or side light scatter with excitation wavelengths of 458, 488, 544, and 633 nm but no enhancement with 351-365 nm excitation. Amplification of elastic scatter from both silver and gold colloids was maximally achieved with structures of 50-200 nm diameter, as shown in forward versus side scatter histograms obtained by flow cytometry. Side scatter enhancements of 2- to 10-fold were observed for gold- or silver-coated polystyrene beads over uncoated polystyrene beads of the same diameter. The origin of this wavelength-dependent, light scattering amplification that was observed by flow cytometry has been identified with excitation into surface plasmon resonance bands of gold and silver nanoparticles on polystyrene latex beads.

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DUPLICATE IS NOT AVAILABLE IN 'CONF'.

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PROCESSING COMPLETED FOR L72
PROCESSING COMPLETED FOR L89
PROCESSING COMPLETED FOR L121
PROCESSING COMPLETED FOR L145

L172 21 DUP REM L8 L72 L89 L121 L145 (9 DUPLICATES REMOVED)

ANSWERS '1-6' FROM FILE HCAPLUS

ANSWER '7' FROM FILE WPIX

ANSWERS '8-10' FROM FILE MEDLINE ANSWERS '11-14' FROM FILE BIOSIS ANSWER '15' FROM FILE PASCAL ANSWERS '16-19' FROM FILE DRUGB ANSWERS '20-21' FROM FILE SCISEARCH

=> file stnguide

FILE 'STNGUIDE' ENTERED AT 11:52:42 ON 06 FEB 2006
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 3, 2006 (20060203/UP).

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YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, MEDLINE, BIOSIS, PASCAL, DRUGB, SCISEARCH' - CONTINUE? (Y)/N:y

21 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE The answer numbers requested are not in the answer set. ENTER ANSWER NUMBER OR RANGE (1):1-21

L172 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2004:927003 HCAPLUS

DOCUMENT NUMBER: 141:384310

TITLE: Delivery vehicle for silver ions

INVENTOR(S): Neuwirth, Robert S.

PATENT ASSIGNEE(S): Ablation Products LLC, USA

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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                                20050915
     WO 2004093793
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
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             TD, TG
                                           CA 2004-2522191
                          AA
                                20041104
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     CA 2522191
                         A1 20041230 US 2004-825930
A2 20060125 EP 2004-759928
    US 2004265390
                                                                   20040416
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     EP 1617850
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
                                           US 2003-463255P P 20030416
WO 2004-US11805 W 20040416
PRIORITY APPLN. INFO.:
    Entered STN: 04 Nov 2004
ED
    A delivery vehicle for a silver ion source such as
AB
     silver nitrate, suitable for use in the treatment of menorrhagia,
     comprises a plurality of physiol. inert beads bearing a tissue cauterizing
     amount of a silver ion source. Preferably the beads are made of a
     physiol. inert polymer, ceramic or stainless steel. The silver
     ion source preferably is silver nitrate and can be substantially
     pure silver nitrate, or can comprise silver nitrate in
     combination with a binder or a diluent. Suitable binders include physiol.
     tolerable synthetic polymeric binders, polysaccharide binders, and the
     like. Diluents can include other salt materials such as potassium
     nitrate. The beads are useful in treating menorrhagia of a mammalian
     uterus. The beads can be delivered to the uterus via a catheter, and are
     distributed throughout the uterine cavity by uterine massage or like
     expedient. Silver ions are delivered to the endometrium and
     cause necrosis of the endometrial tissue. The silver ions
     remaining within the uterine cavity can then be neutralized with a sodium
     chloride solution delivered to the uterus e.g., by catheter, and the beads
     recovered from the uterus.
L172 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 1997:119204 HCAPLUS
DOCUMENT NUMBER:
                        126:135645
                        Intrauterine chemical necrosing method and composition
TITLE:
                        Neuwirth, Robert S.
INVENTOR(S):
                         Neuwirth, Robert S., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 30 pp.
SOURCE:
                         CODEN: PIXXD2
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DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND
                       DATE
                                 APPLICATION NO.
PATENT NO.
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                       19961219 WO 1996-US9560
WO 9640171
                  A1
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            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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    US 6187346
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                                                                  19970917
PRIORITY APPLN. INFO.:
                                           US 1995-486561
                                                               A 19950607
                                           US 1996-614786
                                                               A 19960308
                                           WO 1996-US9560
                                                               W 19960606
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ED Entered STN: 21 Feb 1997

AB A method and composition for effecting chemical necrosis of a tissue lining of a

mammalian body cavity, particularly a uterine endometrium, by delivering a caustic tissue necrosing composition, e.g., a **silver** nitrate and dextran paste, to the tissue to be necrosed and allowing the paste to remain in contact with the target tissue for a period of time sufficient to chemical necrose the entire tissue lining, and then contacting the caustic composition with a deactivating agent, e.g., an aqueous sodium chloride solution,

thereby rendering the caustic composition non-caustic, and then rinsing the cavity. Compns. and methods for delivering medicaments are also disclosed. Thus, the composition for treating the endometrium of the uterus consisted of AgNO3 43, dextran 29 and H2O 29%.

L172 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 1979:76520 HCAPLUS

DOCUMENT NUMBER: 90:76520

AUTHOR(S):

TITLE: Evaluation of polymer flock and metal alloy

intra-tubal device in pigtail monkeys
Richart, Ralph M.; Neuwirth, Robert S.;
Nuwayser, Elie S.; Fenoglio, Cecilia M.

CORPORATE SOURCE: Coll. Physicians Surg., Columbia Univ., New York, NY,

IISA

SOURCE: Contraception (1978), 18(5), 459-68

CODEN: CCPTAY; ISSN: 0010-7824

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 12 May 1984

AB Two intratubal devices, 1 covered with a flock made from ethylene vinyl acetate and the other constructed of titanium-aluminum-vanadium alloy with an etched surface were evaluated after being placed in the Fallopian tubes of pigtail monkeys. In some instances, the devices were medicated with 10% AgNO3 or 50% quinacrine-HCl [69-05-6]. The microflock device anchored in the tube mech., but there was no evidence that either the polymeric or metal alloy device formed an actual attachment with Fallopian tube epithelium. A mech. design approach to intratubal devices may be more productive than one which assumes a tissue-device bond.

L172 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 6

ACCESSION NUMBER: 1971:447142 HCAPLUS

DOCUMENT NUMBER: 75:47142

TITLE: Chemical induction of tubal blockade in the monkey

AUTHOR(S): Neuwirth, Robert S.; Richart, Ralph M.;

Taylor, Howard Canning, Jr.

CORPORATE SOURCE: Internatl. Inst. Study Hum. Reprod., Columbia Univ.,

New York, NY, USA

SOURCE: Obstetrics & Gynecology (New York, NY, United States)

(1971), 38(1), 51-4

CODEN: OBGNAS; ISSN: 0029-7844

DOCUMENT TYPE: Journal LANGUAGE: English Entered STN: 12 May 1984 ED

Eight pigtail monkeys were subjected to retrograde instillation of toxic AB materials into the fallopian tubes during laparotomy. The substances used were hydrophilic ointment with 10 and 20% AgNO3, hydrophilic ointment ecyanoacrylate with 5% ZnCl2. with 50% ZnCl2, and Me  $\alpha$ -Inflammation of the tubes was evident at 3 weeks, invasion by fibroblasts at 5 weeks, and total occlusion at 7 weeks. Fibrosis may have proceeded most rapidly in the tubes treated with AqNO3. The application of such

chemical methods to occlusion of human fallopian tubes was discussed.

L172 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN

1978:141609 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 88:141609

TITLE: Use of water-soluble polymers as silver ion

carriers for fallopian tube closure

Hsia, H. T.; Gregor, H. P.; Neuwirth, R. S.; Richart, R. M. AUTHOR (S):

CORPORATE SOURCE:

Columbia Univ., New York, NY, USA
Papers presented at [the] Meeting - American Chemical SOURCE:

Society, Division of Organic Coatings and Plastics Chemistry (1976), \$6(1), 350-5

CODEN: ACOCAO; ISSN: 0096-512X

DOCUMENT TYPE: Journal LANGUAGE: English Entered STN: 12 May 1984

A small rod, which contained an appropriate amount of Ag ion, which could be released in a relatively short period of time after insertion within the fallopian tube to effect cauterization and subsequent tubal closure, in a carrier system which would become a gel after insertion and retain the chemical locally was prepared Rods were made of various combinations of the Ag salts of alginic acid, AgNO2, Na alginate [9005-38-3] and the poly(oxyethylene) - poly(oxypropylene) copolymers (Pluronics). In vitro studies showed that high concns. of Ag ions could be present in the rod, and that Ag ions which formed complexes with the alginates could be displaced by excess Ca ions. Rods which varied from those which dispersed almost immediately after insertion to those which remained intact for hours or days were tested in rabbits and monkeys. Closure was not achieved, largely because of the invaginated fallopian epithelium. Subsequent, similar formulations injected as pastes showed promise.

L172 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1977:8595 HCAPLUS

DOCUMENT NUMBER: 86:8595

TITLE: Fallopian tube cauterization by silver

ion-polymer gels

AUTHOR (S): Gregor, Harry P.; Hsia, H. T.; Palevsky, Sheila;

Neuwirth, R. S.; Richart, R. M.

CORPORATE SOURCE: Dep. Chem. Eng. Appl. Chem., Columbia Univ., New York,

NY, USA

ACS Symposium Series (1976), 33 (Controlled Release SOURCE:

Polym. Formulations, Symp., 1976), 147-56

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 12 May 1984

AB Ag release from a Pluronic F 127 [9003-11-6] insert in cellulose tubelets in a saline composition (in vitro) was essentially complete within 15 min while release from Na alginate [9005-38-3] or Na alginate containing AgOAc inserts was prolonged. Several types of inserts were implanted into rabbit of monkey fallopian tubes and the histol. results reported. E.g., an insert containing 50% AgNO3 in 40% Ag alginate [9035-88-5] and 10% Ca glycerophosphate [57-03-4] inserted into a rabbit for 3 weeks caused necrosis extending into the fat.

L172 ANSWER 7 OF 21 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1999-024143 [02] WPIX

DOC. NO. NON-CPI: N1999-018523 DOC. NO. CPI: C1999-007401

TITLE: Safe, controllable treatment of menorrhagia - by applying

caustic composition, preferably silver nitrate, to

uterine endometrium then deactivating.

DERWENT CLASS: B04 B06 P32 P34 INVENTOR(S): NEUWIRTH, R S

PATENT ASSIGNEE(S): (NEUW-I) NEUWIRTH R S

COUNTRY COUNT: 83

PATENT INFORMATION:

PAT	TENT NO	KI	ND DATE	WEEK	LA	PG				
WO	9851244	A1	19981119	(199902)	* EN	47				
	RW: AT BE CH	CY	DE DK EA	ES FI FR	GB GH	GM GR	IE IT	KE LS	LU MC	MW NL
	OA PT SI	SE	SZ UG ZW							
	W: AL AM AT	' AU	AZ BA BB	BG BR BY	CA CH	CN CU	CZ DE	DK EE	ES FI	GB GE
	GH GW HU	ID	IL IS JP	KE KG KP	KR KZ	LC LK	LR LS	LT LU	LV MD	MG MK
	MN MW MX	NO	NZ PL PT	RO RU SD	SE SG	SI SK	SL TJ	TM TR	TT UA	UG UZ
	VN YU ZW	1								
AU	9873785	Α	19981208	(199916)						
US	5891457	Α	19990406	(199921)						
EP	1006964	A1	20000614	(200033)	EN					
	R: AL AT BE	CH	CY DE DK	ES FI FR	GB GR	IE IT	LI LT	LU LV	MC MK	NL PT
	RO SE SI									
US	6165492	Α	20001226	(200103)						
MX	9910446	<b>A1</b>	20000801	(200137)						
JP	2002500644	W	20020108	(200206)		40				
AU	746426	В	20020502	(200238)						
RU	2246954	C2	20050227	(200517)						
EP	1006964	B1	20050406	(200523)	EN					
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	RO SE SI									
DE	69829672	E	20050512	(200532)						
ES	2239390	Т3	20050916	(200562)						
DE	69829672	T2	20050929	(200565)						

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9851244	A1	WO 1998-US9560	19980511
AU 9873785	Α	AU 1998-73785	19980511
US 5891457	Α	US 1997-854604	19970512
EP 1006964	A1	EP 1998-921108	19980511
		WO 1998-US9560	19980511
US 6165492	A Cont of	US 1997-854604	19970512
		US 1999-252445	19990218

MX	9910446	A1	MX	1999-10446	19991112
JΡ	2002500644	W	JP	1998-549367	19980511
			WO	1998-US9560	19980511
ΑU	746426	В	ΑU	1998-73785	19980511
RU	2246954	C2	WO	1998-US9560	19980511
			RU	1999-125772	19980511
ΕP	1006964	B1	ΕP	1998-921108	19980511
			WO	1998-US9560	19980511
DE	69829672	E	DE	1998-629672	19980511
			ΕP	1998-921108	19980511
			WO	1998-US9560	19980511
ES	2239390	Т3	ΕP	1998-921108	19980511
DE	69829672	T2	DE	1998-629672	19980511
			ΕP	1998-921108	19980511
			WO	1998-US9560	19980511

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO		
AU 9873785	A Based on	WO 9851244		
EP 1006964	A1 Based on	WO 9851244		
US 6165492	A Cont of	US 5891457		
JP 2002500644	W Based on	WO 9851244		
AU 746426	B Previous Publ.	AU 9873785		
	Based on	WO 9851244		
RU 2246954	C2 Based on	WO 9851244		
EP 1006964	B1 Based on	WO 9851244		
DE 69829672	E Based on	EP 1006964		
	Based on	WO 9851244		
ES 2239390	T3 Based on	EP 1006964		
DE 69829672	T2 Based on	EP 1006964		
	Based on	WO 9851244		

PRIORITY APPLN. INFO: US 1997-854604 199705 19970512; US\_>

ED 19990113

WO 9851244 A UPAB: 19990113 AB

Treatment of menorrhagia comprises: (a) applying a caustic composition (CC) to the endometrium (EM); (b) allowing CC to remain in contact with EM to effect chemical necrosis; (c) contacting CC with a deactivating agent (DA) which deactivates CC and stops necrosis rapidly; and (d) withdrawing the deactivated CC and DA from the uterus. A claimed method for treating the lining of a body cavity while protecting non-target tissue involves: (i) applying a non-caustic DA (which will deactivate the CC used in step (ii) to the non-target tissue; (ii) applying CC to the lining; (iii) allowing CC to remain in contact with the lining to effect chemical necrosis; (iv) contacting CC with DA to deactivate CC and stop necrosis rapidly, where DA comprises (in weight %) dextran (32-40) and normal saline (60-68) and has a viscosity of 220-600 cps; and (v) withdrawing deactivated CC and DA. A claimed kit for treating EM comprises: (a) a chemical cauterising paste comprising (in weight %) caustic agent (10-50), inert carrier (30-80) and water (0-55), of suitable viscosity to remain in contact with the EM in an amount and for a time to effect chemical necrosis, while being sufficiently fluid to cover all EM and sufficiently viscous not to enter the fallopian tubes; and (b) a neutralising agent as for DA in step (v) above.

USE - As well as menorrhagia treatment as above, the body lining treatment method may be used e.g. for delivery of other agents such as antiinflammatories (e.g. cortisone).

ADVANTAGE - The methods provide effective chemical necrosis of EM to treat menorrhagia and encourage amenorrhoea, without many of the disadvantages and dangerous features of prior art intrauterine necrosing techniques. The method is relatively inexpensive. The paste is easy to use, and easily and safely deactivated. The chemical necrosis can be rapidly controlled and terminated to limit the locus of the destructive effect and prevent damage to surrounding non-target tissue and organs. Dwg.1/8

L172 ANSWER 8 OF 21 MEDLINE on STN DUPLICATE 4

ACCESSION NUMBER: 74275838 MEDLINE DOCUMENT NUMBER: PubMed ID: 4367035

TITLE: Further studies on chemical closure of the Fallopian tubes

in the monkey.

AUTHOR: Neuwirth R S; Ryu K; Richart R M

SOURCE: American journal of obstetrics and gynecology, (1974 Jun

15) 119 (4) 463-5.

Journal code: 0370476. ISSN: 0002-9378.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 197409

ENTRY DATE: Entered STN: 19900310

Last Updated on STN: 19900310 Entered Medline: 19740917

> Last Updated on STN: 19900310 Entered Medline: 19740917

L172 ANSWER 9 OF 21 MEDLINE on STN DUPLICATE 5

ACCESSION NUMBER: 72007847 MEDLINE DOCUMENT NUMBER: PubMed ID: 4999515

TITLE: Transvaginal human sterilization: a preliminary report.

AUTHOR: Richart R M; Gutierrez Najar A J; Neuwirth R S

SOURCE: American journal of obstetrics and gynecology, (1971 Sep)

111 (1) 108-10.

Journal code: 0370476. ISSN: 0002-9378.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 197112

ENTRY DATE: Entered STN: 19900310

Last Updated on STN: 19900310 Entered Medline: 19711207

ED Entered STN: 19900310

Last Updated on STN: 19900310 Entered Medline: 19711207

L172 ANSWER 10 OF 21 MEDLINE ON STN ACCESSION NUMBER: 76073879 MEDLINE DOCUMENT NUMBER: PubMed ID: 1105014

TITLE: Female sterilization. An overview.

AUTHOR: Richart R M; Darabi K F; Neuwirth R S

SOURCE: Major problems in obstetrics and gynecology, (1975) 8

81-101. Ref: 44

Journal code: 0261660. ISSN: 0076-2873.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

197602

ENTRY DATE:

Entered STN: 19900313

Last Updated on STN: 19900313

Entered Medline: 19760209

Entered STN: 19900313 ED.

Last Updated on STN: 19900313 Entered Medline: 19760209

L172 ANSWER 11 OF 21 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

2001:404289 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV200100404289

Intrauterine chemical necrosing method and composition. TITLE:

Neuwirth, Robert S. [Inventor] AUTHOR(S):

PATENT INFORMATION: US 6197351 20010306

Official Gazette of the United States Patent and Trademark SOURCE:

Office Patents, (Mar. 6, 2001) Vol. 1244, No. 1. e-file. CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

Patent English

LANGUAGE: ENTRY DATE:

Entered STN: 22 Aug 2001

Last Updated on STN: 22 Feb 2002

ED Entered STN: 22 Aug 2001

Last Updated on STN: 22 Feb 2002

A method and composition for effecting chemical necrosis of a tissue AR lining of a mammalian body cavity, particularly a uterine endometrium, by delivering a caustic tissue necrosing composition, e.g., a silver nitrate and dextran paste, to the tissue to be necrosed and allowing the paste to remain in contact with the target tissue for a period of time sufficient to chemically necrose substantially the entirety of the tissue lining, and then contacting the caustic composition with a deactivating agent, e.g., an aqueous sodium chloride solution, thereby rendering the caustic composition non-caustic, and then rinsing the cavity.

Compositions and methods for delivering medicaments are also disclosed.

L172 ANSWER 12 OF 21 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

2001:361134 BIOSIS ACCESSION NUMBER: PREV200100361134 DOCUMENT NUMBER:

Intrauterine chemical cauterizing method and composition. TITLE:

AUTHOR(S): Neuwirth, Robert S. [Inventor, Reprint author]

CORPORATE SOURCE: Englewood, NJ, USA

ASSIGNEE: Ablation Products, Inc., Englewood, NJ, USA

PATENT INFORMATION: US 6187346 20010213

Official Gazette of the United States Patent and Trademark SOURCE:

Office Patents, (Feb. 13, 2001) Vol. 1243, No. 2. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

ENTRY DATE:

Entered STN: 2 Aug 2001

Last Updated on STN: 19 Feb 2002

ED Entered STN: 2 Aug 2001

Last Updated on STN: 19 Feb 2002

A method and composition for effecting necrosis of a tissue lining of a AB mammalian body cavity, particularly a uterine endometrium, by introducing an applicator comprising a hysteroscope housing a first and a second catheter connected to a catheter into the uterus, distending the uterus by introducing CO2 gas under pressure, delivering a **silver** nitrate paste to the endometrium through the first catheter and allowing the paste to remain a sufficient amount of time to substantially cauterize the entirety of the tissue lining, particularly the endometrium and delivering an aqueous sodium chloride solution to the uterus through the second catheter thereby neutralizing the **silver** nitrate and rinsing the uterine cavity.

L172 ANSWER 13 OF 21 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 2001:293698 BIOSIS DOCUMENT NUMBER: PREV200100293698

TITLE: Intrauterine chemical necrosing method, composition, and

apparatus.

AUTHOR(S): Neuwirth, Robert S. [Inventor, Reprint author]
CORPORATE SOURCE: 400 Gloucester St., Englewood, NJ, 07631, USA

PATENT INFORMATION: US 6165492 20001226

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (Dec. 26, 2000) Vol. 1241, No. 4. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 20 Jun 2001

Last Updated on STN: 19 Feb 2002

ED Entered STN: 20 Jun 2001

Last Updated on STN: 19 Feb 2002

AB A method and composition for effecting chemical necrosis of a tissue lining of a mammalian body cavity, particularly a uterine endometrium, by delivering a caustic tissue necrosing composition, e.g., a silver nitrate and dextran paste, to the tissue to be necrosed and allowing the paste to remain in contact with the target tissue for a period of time sufficient to chemically necrose substantially the entirety of the tissue lining, and then contacting the caustic composition with a deactivating agent, e.g., an aqueous sodium chloride solution, thereby rendering the caustic composition non-caustic, and then rinsing the cavity. Compositions and methods for delivering medicaments are also disclosed.

L172 ANSWER 14 OF 21 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

stn

ACCESSION NUMBER: 1999:305448 BIOSIS DOCUMENT NUMBER: PREV199900305448

TITLE: Intrauterine chemical necrosing method, composition, and

apparatus.

AUTHOR(S): Neuwirth, Robert S. [Inventor, Reprint author]
CORPORATE SOURCE: 400 Gloucester St., Englewood, NJ, 07631, USA

PATENT INFORMATION: US 5891457 19990615

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (15-JUN-99) Vol. 1221, No. 1. print.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 12 Aug 1999

Last Updated on STN: 12 Aug 1999

ED Entered STN: 12 Aug 1999

Last Updated on STN: 12 Aug 1999

AB A method and composition for effecting chemical necrosis of a tissue lining of a mammalian body cavity, particularly a uterine endometrium, by delivering a caustic tissue necrosing composition, e.g., a silver nitrate and dextran paste, to the tissue to be necrosed and allowing the paste to remain in contact with the target tissue for a period of time

sufficient to chemically necrose substantially the entirety of the tissue lining, and then contacting the caustic composition with a deactivating agent, e.g., an aqueous sodium chloride solution, thereby rendering the caustic composition non-caustic, and then rinsing the cavity. Compositions and methods for delivering medicaments are also disclosed.

L172 ANSWER 15 OF 21 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED.

on STN

ACCESSION NUMBER:

1977-0284846 PASCAL

TITLE:

4 : 6

Fallopian tube cauterization by silver

ion-polymer gels.

AUTHOR:

GREGOR H. P.; HSIA H. T.; PALEVSKY S.; NEUWIRTH

R. S.; RICHART R. M.

CORPORATE SOURCE:

Dep. chem. eng. appl. chem., Columbia univ., New York,

N.Y. 10027

SOURCE:

A.C.S. Symp. Ser., (1976), 33, 147-156, 16 refs.

DOCUMENT TYPE:

Journal Analytic

BIBLIOGRAPHIC LEVEL: COUNTRY:

United States

LANGUAGE:

English

AVAILABILITY:

CNRS-17351

20030206

L172 ANSWER 16 OF 21 DRUGB CORYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1979-10929 M P

TITLE:

EVALUATION OF POLYMER FLOCK AND METAL ALLOY INTRA-TUBAL

DEVICE IN PIGTAIL MONKEYS.

AUTHOR:

RICHART R M; NEUWIRTH R S; NUWAYSER E S; FENOGLIO C

LOCATION:

NEW YORK, N.Y., USA.

SOURCE:

CONTRACEPTION (18, NO.5, 459-68, 1978)

LANGUAGE:

English

L172 ANSWER 17 OF 21 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN ACCESSION NUMBER: 1976-20065 P G

TITLE:

USE OF WATER-SOLUBLE POLYMERS AS SILVER ION

CARRIERS FOR FALLOPIAN TUBE CLOSURE.

AUTHOR:

HSIA H T; GREGOR H P; NEUWIRTH R S; RICHART R M

LOCATION:

NEW YORK, N.Y., USA.

SOURCE:

ABSTR.PAPERS, AM.CHEM.SOC. CENTEN.MEET. ORPL (92, 1976)

L172 ANSWER 18 OF 21 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1974-27003 P

TITLE:

FURTHER STUDIES ON CHEMICAL CLOSURE OF THE FALLOPIAN TUBES IN

THE MONKEY.

AUTHOR:

NEUWIRTH R S; RYU K; RICHART R M

LOCATION:

NEW YORK, N.Y., USA.

SOURCE:

AM.J.OBSTET.GYNECOL. (119, NO.4, 463-65, \( \sqrt{1974} \)

L172 ANSWER 19 OF 21 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN ACCESSION NUMBER: 1971-28957 P

CHEMICAL INDUCTION OF TUBAL BLOCKADE IN THE MONKEY.

TITLE: AUTHOR:

NEUWIRTH R S; RICHART R M; TAYLOR H C JR.

LOCATION:

NEW YORK, N.Y.

SOURCE:

OBSTET.GYNECOL. (38, NO.1, 51-54, 1971)

L172 ANSWER 20 OF 21 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on

ACCESSION NUMBER:

1976:413796 SCISEARCH

THE GENUINE ARTICLE: CL118

- 1 5 ~

TITLE: FALLOPIAN-TUBE CAUTERIZATION BY SILVER

ION-POLYMER GELS

AUTHOR: GREGOR H P (Reprint); HSIA H T; PALEVSKY S; NEUWIRTH

R S; RICHART R M

CORPORATE SOURCE: COLUMBIA UNIV, COLL PHYS & SURG, NEW YORK, NY 10032;

COLUMBIA UNIV, DEPT CHEM ENGN & APPL CHEM, NEW YORK, NY

10027; ST LUKES HOSP CTR, NEW YORK, NY 10025

COUNTRY OF AUTHOR: USA

SOURCE: ACS SYMPOSIUM SERIES, (1976) No. 33, pp. 147-156.

ISSN: 0097-6156.

PUBLISHER: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 16

ENTRY DATE: Entered STN: 1994

Last Updated on STN: 1994

ED Entered STN: 1994

Last Updated on STN: 1994

L172 ANSWER 21 OF 21 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 1976:119136 SCISEARCH

THE GENUINE ARTICLE: BK352

TITLE: USE OF WATER-SOLUBLE POLYMERS AS SILVER ION

CARRIERS FOR FALLOPIAN-TUBE CLOSURE

AUTHOR: HSIA H T (Reprint); GREGOR H P; NEUWIRTH R S;

RICHART R M

CORPORATE SOURCE: COLUMBIA UNIV, 353 TERRACE, NEW YORK, NY 10027; ST LUKES

HOSP CTR, NEW YORK, NY 10025; COLUMBIA UNIV, COLL PHYS &

SURG, NEW YORK, NY 10032

COUNTRY OF AUTHOR: US

SOURCE: ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY,

(1976) Supp. [I], pp. 92-92.

ISSN: 0065-7727.

PUBLISHER: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.

DOCUMENT TYPE: Conference; Journal

LANGUAGE: English

REFERENCE COUNT:

ENTRY DATE: Entered STN: 1994

Last Updated on STN: 1994

ED Entered STN: 1994

Last Updated on STN: 1994

=> file stnguide

FILE 'STNGUIDE' ENTERED AT 11:54:50 ON 06 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE

AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 3, 2006 (20060203/UP).

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(FILE 'HOME' ENTERED AT 09:23:33 ON 06 FEB 2006)

FILE 'HCAPLUS' ENTERED AT 09:23:41 ON 06 FEB 2006 ACT ARN930HCAAPP/A

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# ACT ARN930HCAINV/A

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L3 SEL PLU=ON L2 1- RN : 16 TERMS
L4 ( 16) SEA ABB=ON PLU=ON L3
L5 ( 28) SEA ABB=ON PLU=ON NEUWIRTH, R?/AU
L6 ( 6) SEA ABB=ON PLU=ON L5 AND L4
L7 ( 4) SEA ABB=ON PLU=ON L5 AND (SILVER OR AG)
L8 6 SEA ABB=ON PLU=ON (L6 OR L7)

FILE 'STNGUIDE' ENTERED AT 09:23:56 ON 06 FEB 2006

FILE 'WPIX' ENTERED AT 09:24:18 ON 06 FEB 2006 ACT ARN930WPIAPP/A

L9 1 SEA ABB=ON PLU=ON US2004-825930/APPS

FILE 'REGISTRY' ENTERED AT 09:24:38 ON 06 FEB 2006 ACT ARN930REGAPP/A

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L12	16	SEA ABB=ON PLU=ON L11
L13	8	SEA ABB=ON PLU=ON L12 AND PMS/CI
		SAVE TEMP L13 ARN930CLPOL/A
		D SCAN
L14	298	SEA ABB=ON PLU=ON 9003-39-8/RN,CRN
		SAVE TEMP L14 ARN930PYRROL/A
L15	1033	SEA ABB=ON PLU=ON 9004-54-0/RN, CRN
		SAVE TEMP L15 ARN930DEX/A
L16	70	SEA ABB=ON PLU=ON 7757-79-1/RN,CRN

FILE 'STNGUIDE' ENTERED AT 09:29:11 ON 06 FEB 2006

SAVE TEMP L16 ARN930KNO3/A

FILE 'HCAPLUS' ENTERED AT 09:30:11 ON 06 FEB 2006 D SCAN L8

FILE 'STNGUIDE' ENTERED AT 09:30:22 ON 06 FEB 2006

FILE 'REGISTRY' ENTERED AT 09:33:55 ON 06 FEB 2006 L17 6 SEA ABB=ON PLU=ON L13 NOT (L14 OR L15)

FILE 'STNGUIDE' ENTERED AT 09:34:22 ON 06 FEB 2006

FILE 'REGISTRY' ENTERED AT 09:34:42 ON 06 FEB 2006 D SCAN L17

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               L? OR NANOPARTICUL? OR ?GRANUL? OR MICROGRANUL? OR NANOGRANUL?
L19
               OUE ABB=ON PLU=ON SILVER OR AG
               OUE ABB=ON PLU=ON ?POLYMER? OR HOMOPOLYMER? OR POLYPROPYLEN?
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               OR POLYSTYREN? OR POLYETHYLEN? OR PET
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             1) SEA ABB=ON PLU=ON US2004-825930/APPS
L21 (
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               SEL PLU=ON L21 1- RN : 16 TERMS
            16) SEA ABB=ON PLU=ON L22
L23 (
             6 SEA ABB=ON PLU=ON L23 AND AG/ELS
L24
               D SCAN
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    FILE 'HCAPLUS' ENTERED AT 09:40:22 ON 06 FEB 2006
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L25
               OUE ABB=ON PLU=ON L17
L26
          4574 SEA ABB=ON PLU=ON L25 AND L26
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L28
             2 SEA ABB=ON PLU=ON L28 AND L16
L29
               D SCAN TI HIT
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         12186 SEA ABB=ON PLU=ON L26(L) L18
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L33
         1387 SEA ABB=ON PLU=ON L17 (L) L19
L34
           38 SEA ABB=ON PLU=ON L33 AND L34
L35
          4223 SEA ABB=ON PLU=ON L24 (L) L20
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           718 SEA ABB=ON PLU=ON L24 (L) L39
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    FILE 'HCAPLUS' ENTERED AT 09:50:46 ON 06 FEB 2006
            11 SEA ABB=ON PLU=ON L28 AND L39
L44
            61 SEA ABB=ON PLU=ON L28 AND L18
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L47
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L48
               D SCAN TI HIT
               D QUE L29
               D QUE L43
             O SEA ABB=ON PLU=ON L43 AND (PHARM?/SX,SC)
L49
             5 SEA ABB=ON PLU=ON L44 AND PHARM?/SC,SX
L50
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    FILE 'HCAPLUS' ENTERED AT 09:55:20 ON 06 FEB 2006
         28121 SEA ABB=ON PLU=ON L20 (L) L19
L51
L52
         166867 SEA ABB=ON PLU=ON POLYMERS+PFT,OLD/CT
L53
           308 SEA ABB=ON PLU=ON L52 (L) L19
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    FILE 'HCAPLUS' ENTERED AT 09:56:40 ON 06 FEB 2006
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L54
          4425 SEA ABB=ON PLU=ON L52 (L) (L18 OR L39)
L55
            22 SEA ABB=ON PLU=ON L53 AND L55
L56
             O SEA ABB=ON PLU=ON L56 AND PHARM?/SC,SX
L57
    FILE 'STNGUIDE' ENTERED AT 09:58:24 ON 06 FEB 2006
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    FILE 'HCAPLUS' ENTERED AT 09:59:05 ON 06 FEB 2006
            62 SEA ABB=ON PLU=ON L53 AND (L18 OR L39)
L58
             7 SEA ABB=ON PLU=ON L53 AND ?DELIVER?
L59
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L60
             9 SEA ABB=ON PLU=ON L60 AND PHARM?/SC,SX
L61
               D SCAN TI HIT
            15 SEA ABB=ON PLU=ON L29 OR L50 OR L61
L62
    FILE 'ZCAPLUS' ENTERED AT 10:01:14 ON 06 FEB 2006
               E DRUG DELIVERY/CT
               E E7+PFT, OLD/CT
    FILE 'HCAPLUS' ENTERED AT 10:01:43 ON 06 FEB 2006
               OUE ABB=ON PLU=ON "DRUG DELIVERY SYSTEMS"+PFT.OLD.NT/CT
L63
             6 SEA ABB=ON PLU=ON L53 AND L63
L64
            15 SEA ABB=ON PLU=ON L29 OR L50 OR L61 OR L64
L65
               D SCAN TI HIT
    FILE 'STNGUIDE' ENTERED AT 10:03:16 ON 06 FEB 2006
    FILE 'HCAPLUS' ENTERED AT 10:04:23 ON 06 FEB 2006
            13 SEA ABB=ON PLU=ON L65 AND (AY<2004 OR PY<2004 OR PRY<2004 OR
L66
               MY<2004 OR REVIEW/DT)
               SAVE TEMP L66 ARN930HCA1B/A
             2 SEA ABB=ON PLU=ON L65 NOT L66
L67
               SAVE TEMP L67 ARN930HCA1A/A
     FILE 'STNGUIDE' ENTERED AT 10:05:23 ON 06 FEB 2006
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FILE 'HCAPLUS' ENTERED AT 10:05:43 ON 06 FEB 2006 L68 12 SEA ABB=ON PLU=ON L66 NOT L8 D SCAN TI

FILE 'STNGUIDE' ENTERED AT 10:06:01 ON 06 FEB 2006

FILE 'HCAPLUS' ENTERED AT 10:07:25 ON 06 FEB 2006

FILE 'STNGUIDE' ENTERED AT 10:07:40 ON 06 FEB 2006 D QUE L66

FILE 'ZCAPLUS' ENTERED AT 10:19:18 ON 06 FEB 2006

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L69
                QUE ABB=ON PLU=ON NEUWIRTH, R?/AU
     FILE 'WPIX' ENTERED AT 10:19:37 ON 06 FEB 2006
L70
              9 SEA ABB=ON PLU=ON NEUWIRTH, R?/AU
L71
                QUE ABB=ON PLU=ON A61K033-38/IPC
L72
              3 SEA ABB=ON PLU=ON L70 AND L71
                SAVE TEMP L72 ARN930WPIINV/A
L73
                OUE ABB=ON PLU=ON ((P1752 OR P1741)(P) S1467)/PLE
                QUE ABB=ON PLU=ON ((P1343 OR P1150)(P)S1467)/PLE
L74
                QUE ABB=ON PLU=ON ((P1161 OR P1150)(P)S1467)/PLE
L75
                QUE ABB=ON PLU=ON A547/M0, M1, M2, M3, M4, M5, M6
L76
L77
             26 SEA ABB=ON PLU=ON L76 AND (L73 OR L74)
              2 SEA ABB=ON PLU=ON L77 AND L71
L78
                D TRI 1-2
                D TRI L77 1-5
L79
              4 SEA ABB=ON PLU=ON L77 AND A61?/IPC
               D TRI 1-4
              O SEA ABB=ON PLU=ON L77 AND A61P?/IPC
L80
                D BIB L79 1-4
     FILE 'STNGUIDE' ENTERED AT 10:26:27 ON 06 FEB 2006
     FILE 'WPIX' ENTERED AT 10:27:46 ON 06 FEB 2006
L81
              O SEA ABB=ON PLU=ON L77 AND R01851/PLE
              4 SEA ABB=ON PLU=ON L79 OR L81
L82
                SAVE TEMP L82 ARN930WPI1B/A
     FILE 'STNGUIDE' ENTERED AT 10:28:41 ON 06 FEB 2006
     FILE 'USPATFULL' ENTERED AT 10:28:59 ON 06 FEB 2006
     FILE 'USPATFULL, USPAT2' ENTERED AT 10:29:07 ON 06 FEB 2006
          64751 SEA ABB=ON PLU=ON L17
L83
             38 SEA ABB=ON PLU=ON L83 AND A61K033-38/IPC
L84
             36 SEA ABB=ON PLU=ON L84 AND (L18/TI,IT,CC,CT,ST,STP,BI OR
L85
                L39/TI, IT, CC, CT, ST, STP, BI)
             34 SEA ABB=ON PLU=ON L85 AND (AY<2004 OR PY<2004 OR PRY<2004)
L86
                D KWIC
                D QUE
                SAVE TEMP L86 ARN930USP1B/A
              2 SEA ABB=ON PLU=ON L85 NOT L86
L87
                SAVE TEMP L87 ARN930USP1A/A
     FILE 'STNGUIDE' ENTERED AT 10:33:15 ON 06 FEB 2006
     FILE 'MEDLINE' ENTERED AT 10:33:47 ON 06 FEB 2006
            110 SEA ABB=ON PLU=ON NEUWIRTH, R?/AU
L88
              5 SEA ABB=ON PLU=ON L88 AND L19
L89
                SAVE TEMP L89 ARN930MEDINV/A
               D TRI 1-5
               E POLYMER/CT
               E E24+ALL
               E POLYMERS/CT
               E SILVER/CT
               E E50+ALL
     FILE 'REGISTRY' ENTERED AT 10:35:58 ON 06 FEB 2006
               SET SMARTSELECT ON
L*** DEL
           SEL L17 1- CHEM : 17641 TERMS
               SET SMARTSELECT OFF
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FILE 'MEDLINE' ENTERED AT 10:36:13 ON 06 FEB 2006
L90
         429132 SEA ABB=ON PLU=ON POLYMERS+PFT,OLD,NT/CT
L91
           7042 SEA ABB=ON PLU=ON SILVER+PFT,OLD,NT/CT
     FILE 'REGISTRY' ENTERED AT 10:39:18 ON 06 FEB 2006
                SET SMARTSELECT ON
                SEL PLU=ON L24 1- CHEM: 227 TERMS
L92
                SET SMARTSELECT OFF
     FILE 'MEDLINE' ENTERED AT 10:39:19 ON 06 FEB 2006
         201576 SEA ABB=ON PLU=ON L92
L93
L94
           1953 SEA ABB=ON PLU=ON L17
           9738 SEA ABB=ON PLU=ON (L90 OR L94) AND (L91 OR L93)
L95
                D TRI 1-2
L96
           506 SEA ABB=ON PLU=ON L19 (10A) L20
           7887 SEA ABB=ON PLU=ON L20 (15A) (L18 OR L39)
L97
            81 SEA ABB=ON PLU=ON L95 AND L96
L98
            10 SEA ABB=ON PLU=ON L98 AND L97
L99
             O SEA ABB=ON PLU=ON L98 AND (L14 OR L15 OR L16)
L100
             10 SEA ABB=ON PLU=ON L99 OR L100
L101
             2 SEA ABB=ON PLU=ON L98 AND ?DEXTRAN?
L102
     FILE 'REGISTRY' ENTERED AT 10:43:04 ON 06 FEB 2006
               D QUE L14
              1 SEA ABB=ON PLU=ON 9003-39-8/RN
L103
                D QUE L15
L104
              1 SEA ABB=ON PLU=ON 9004-54-0/RN
                D QUE L16
              1 SEA ABB=ON PLU=ON 7757-79-1/RN
L105
     FILE 'MEDLINE' ENTERED AT 10:44:15 ON 06 FEB 2006
     FILE 'REGISTRY' ENTERED AT 10:44:34 ON 06 FEB 2006
                SELECT L104 1- CN
                SELECT L103 1- CN
                SELECT L105 1- CN
     FILE 'MEDLINE' ENTERED AT 10:45:52 ON 06 FEB 2006
L*** DEL
              0 S L98 AND E75-E125
              1 SEA ABB=ON PLU=ON L98 AND ((A-DEXTRAN/BI OR CDC-H/BI
L106
                OR "DEX 500"/BI OR "DEXTRAN B 512"/BI OR "DEXTRAN B1355"/BI OR
                "DEXTRAN D 10"/BI OR "DEXTRAN PL 1S"/BI OR "DEXTRAN PT 25"/BI
                OR "DEXTRAN PVD"/BI OR "DEXTRAN RMI"/BI OR "DEXTRAN T 10"/BI
                OR "DEXTRAN T 110"/BI OR "DEXTRAN T 150"/BI OR "DEXTRAN T
                20"/BI OR "DEXTRAN T 2000"/BI OR "DEXTRAN T 500"/BI OR
                "DEXTRAN T 70"/BI OR "DEXTRAN 1.5"/BI OR "DEXTRAN 10"/BI OR
                "DEXTRAN 1000"/BI OR "DEXTRAN 10000"/BI OR "DEXTRAN 110"/BI OR
                "DEXTRAN 15"/BI OR "DEXTRAN 150"/BI OR "DEXTRAN 2000"/BI OR
                "DEXTRAN 20000"/BI OR "DEXTRAN 250"/BI OR "DEXTRAN 3000"/BI OR
                "DEXTRAN 40"/BI OR "DEXTRAN 40000"/BI OR "DEXTRAN 45"/BI OR
                "DEXTRAN 500"/BI OR "DEXTRAN 60"/BI OR "DEXTRAN 70"/BI OR
                "DEXTRAN 75"/BI OR DEXTRAN/BI OR DEXTRANEN/BI OR DEXTRANS/BI
                OR DEXTRAVEN/BI OR EUDEXTRAN/BI OR EXPANDEX/BI OR "G 75"/BI OR
                GENTRAN/BI OR HEMODEX/BI OR HYSCON/BI OR HYSKON/BI OR INFUCOLL/
                BI OR INTRADER/BI OR INTRADEX/BI OR LMD/BI OR LMWD/BI))
              O SEA ABB=ON PLU=ON L98 AND (("ACP 10"/BI OR "AGENT AT 717"/BI
L107
                OR "AGRIMER K 30"/BI OR "AGRIMER 15"/BI OR "AGRIMER 30"/BI OR
                "AGRIMER 90"/BI OR "ALBIGEN A"/BI OR "ALDACOL Q"/BI OR
                "ANTARON P 804"/BI OR "ANTITOX VANA"/BI OR "AT 717"/BI OR "B
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7509"/BI OR BOLINAN/BI OR "CEVIAN A 88036"/BI OR "DISCOL K 30L"/BI OR "DISINTEX 200"/BI OR "DIVERGAN EF"/BI OR "DIVERGAN F"/BI OR "DIVERGAN RS"/BI OR "GAFTEX AE-K 15"/BI OR "GANEX P 804"/BI OR HEMODESIS/BI OR HEMODEZ/BI OR "K 115 (VINYL POLYMER)"/BI OR "K 115"/BI OR "K 12"/BI OR "K 120 (VINYL POLYMER)"/BI OR "K 120"/BI OR "K 15 (POLYMER)"/BI OR "K 15"/BI OR "K 17"/BI OR "K 25 (SURFACTANT)"/BI OR "K 25"/BI OR "K 29-32"/BI OR "K 30"/BI OR "K 30C"/BI OR "K 60 (POLYMER)"/BI OR "K 60"/BI OR "K 85 (VINYL POLYMER)"/BI OR "K 85"/BI OR "K 90"/BI OR "K 92 (VINYL POLYMER)"/BI OR "K 92"/BI OR "1-VINYL-2-PYRROLIDINONE POLYMER"/BI OR "1-VINYL-2-PYRROLIDINONE, 1-ETHENYL-, HOMOPOLYMER"/BI OR "2-PYRROLIDINONE, 1-ETHENYL-, HOMOPOLYMER"/BI OR "2-PYRROLIDINO NE, 1-VINYL-, POLYMERS"/BI OR "40K (VINYL POLYMER)"/BI OR 40K/BI))

L108

O SEA ABB=ON PLU=ON L98 AND ((COLLO-BO/BI OR "E 252"/BI OR NITER/BI OR NITRE/BI OR "NITRIC ACID POTASSIUM SALT (1:1)"/BI OR "NITRIC ACID POTASSIUM SALT"/BI OR "NITRIC ACID, POTASSIUM SALT"/BI OR "POTASSIUM NITRATE"/BI OR SALTPETER/BI))

L109

11 SEA ABB=ON PLU=ON L99 OR L100 OR L101 OR L102 OR (L106 OR L107 OR L108)
D TRI 1-11
D OUE

L110

33 SEA ABB=ON PLU=ON L96 AND L97 D QUE D TRI L110 13

L111

1 SEA ABB=ON PLU=ON L110 AND ?DEXTRAN?

L112

O SEA ABB=ON PLU=ON L110 AND ((A-DEXTRAN/BI OR CDC-H/BI OR "DEX 500"/BI OR "DEXTRAN B 512"/BI OR "DEXTRAN B1355"/BI OR "DEXTRAN D 10"/BI OR "DEXTRAN PL 1S"/BI OR "DEXTRAN PT 25"/BI OR "DEXTRAN PVD"/BI OR "DEXTRAN RMI"/BI OR "DEXTRAN T 10"/BI OR "DEXTRAN T 110"/BI OR "DEXTRAN T 150"/BI OR "DEXTRAN T 20"/BI OR "DEXTRAN T 2000"/BI OR "DEXTRAN T 500"/BI OR "DEXTRAN T 70"/BI OR "DEXTRAN 1.5"/BI OR "DEXTRAN 10"/BI OR "DEXTRAN 1000"/BI OR "DEXTRAN 10000"/BI OR "DEXTRAN 110"/BI OR "DEXTRAN 15"/BI OR "DEXTRAN 150"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 20000"/BI OR "DEXTRAN 250"/BI OR "DEXTRAN 3000"/BI OR "DEXTRAN 40"/BI OR "DEXTRAN 40000"/BI OR "DEXTRAN 45"/BI OR "DEXTRAN 500"/BI OR "DEXTRAN 60"/BI OR "DEXTRAN 70"/BI OR "DEXTRAN 75"/BI OR DEXTRAN/BI OR DEXTRANEN/BI OR DEXTRANS/BI OR DEXTRAVEN/BI OR EUDEXTRAN/BI OR EXPANDEX/BI OR "G 75"/BI OR GENTRAN/BI OR HEMODEX/BI OR HYSCON/BI OR HYSKON/BI OR INFUCOLL/ BI OR INTRADER/BI OR INTRADEX/BI OR LMD/BI OR LMWD/BI))

L113

O SEA ABB=ON PLU=ON L110 AND (("ACP 10"/BI OR "AGENT AT 717"/BI OR "AGRIMER K 30"/BI OR "AGRIMER 15"/BI OR "AGRIMER 30"/BI OR "AGRIMER 90"/BI OR "ALBIGEN A"/BI OR "ALDACOL Q"/BI OR "ANTARON P 804"/BI OR "ANTITOX VANA"/BI OR "AT 717"/BI OR "B 7509"/BI OR BOLINAN/BI OR "CEVIAN A 88036"/BI OR "DISCOL K 30L"/BI OR "DISINTEX 200"/BI OR "DIVERGAN EF"/BI OR "DIVERGAN F"/BI OR "DIVERGAN RS"/BI OR "GAFTEX AE-K 15"/BI OR "GANEX P 804"/BI OR HEMODESIS/BI OR HEMODEZ/BI OR "K 115 (VINYL POLYMER) "/BI OR "K 115"/BI OR "K 12"/BI OR "K 120 (VINYL POLYMER) "/BI OR "K 120"/BI OR "K 15 (POLYMER) "/BI OR "K 15"/BI OR "K 17"/BI OR "K 25 (SURFACTANT)"/BI OR "K 25"/BI OR "K 29-32"/BI OR "K 30"/BI OR "K 30C"/BI OR "K 60 (POLYMER)"/BI OR "K 60"/BI OR "K 85 (VINYL POLYMER)"/BI OR "K 85"/BI OR "K 90"/BI OR "K 92 (VINYL POLYMER)"/BI OR "K 92"/BI OR "1-VINYL-2-PYRROLIDINONE POLYMER"/BI OR "1-VINYL-2-PYRROLIDONE HOMOPOLYMER "/BI OR "1-VINYL-2-PYRROLIDONE POLYMER"/BI OR 143RP/BI OR "2-PYRROLIDINONE, 1-ETHENYL-, HOMOPOLYMER"/BI OR "2-PYRROLIDINO

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NE, 1-VINYL-, POLYMERS"/BI OR "40K (VINYL POLYMER) "/BI OR
                 40K/BI))
               O SEA ABB=ON PLU=ON L110 AND ((COLLO-BO/BI OR "E 252"/BI OR
L114
                 NITER/BI OR NITRE/BI OR "NITRIC ACID POTASSIUM SALT (1:1)"/BI
                 OR "NITRIC ACID POTASSIUM SALT"/BI OR "NITRIC ACID, POTASSIUM
                 SALT"/BI OR "POTASSIUM NITRATE"/BI OR SALTPETER/BI))
              34 SEA ABB=ON PLU=ON (L109 OR L110 OR L111 OR L112 OR L113 OR
L115
                 L114)
              33 SEA ABB=ON PLU=ON L115 AND (L18 OR L39)
L116
              34 SEA ABB=ON PLU=ON L115 OR L116
L117
                 D TRI 1-10
              15 SEA ABB=ON PLU=ON L117 AND (AY<2004 OR PY<2004 OR PRY<2004
L118
                 OR MY<2004 OR REVIEW/DT)
                 SAVE TEMP L118 ARN930MED1B/A
                 D QUE
              19 SEA ABB=ON PLU=ON L117 NOT L118
L119
                 SAVE TEMP L119 ARN930MED1A/A
     FILE 'STNGUIDE' ENTERED AT 10:57:48 ON 06 FEB 2006
     FILE 'EMBASE' ENTERED AT 10:58:23 ON 06 FEB 2006
              86 SEA ABB=ON PLU=ON NEUWIRTH, R?/AU
L120
               2 SEA ABB=ON PLU=ON L120 AND L19
L121
                 SAVE TEMP L121 ARN930EMBINV/A
                 D TRI 1-2
     FILE 'STNGUIDE' ENTERED AT 10:58:54 ON 06 FEB 2006
     FILE 'EMBASE' ENTERED AT 10:59:16 ON 06 FEB 2006
           7229 SEA ABB=ON PLU=ON L20 (10A) (L18 OR L39)
L122
            446 SEA ABB=ON PLU=ON L19 (10A) L20
L123
           1626 SEA ABB=ON PLU=ON L19 (15A) (L18 OR L39)
L124
              26 SEA ABB=ON PLU=ON L122 AND L123 AND L124
L125
                 D TRI 1-5
     FILE 'STNGUIDE' ENTERED AT 11:00:27 ON 06 FEB 2006
     FILE 'EMBASE' ENTERED AT 11:01:01 ON 06 FEB 2006
     FILE 'REGISTRY' ENTERED AT 11:01:10 ON 06 FEB 2006
                 SET SMARTSELECT ON
                 SEL PLU=ON L24 1- CHEM: 227 TERMS
L126
                 SET SMARTSELECT OFF
     FILE 'EMBASE' ENTERED AT 11:01:11 ON 06 FEB 2006
         148563 SEA ABB=ON PLU=ON L126
L127
          14378 SEA ABB=ON PLU=ON L17
L128
            253 SEA ABB=ON PLU=ON L127 AND L128
L129
                 E POLYMER/CT
            253 SEA ABB=ON PLU=ON L129 AND POLYMER+PFT,OLD,NT/CT
L130
                 E SILVER/CT
           5583 SEA ABB=ON PLU=ON SILVER+PFT,OLD,NT/CT
65 SEA ABB=ON PLU=ON L130 AND L131
18 SEA ABB=ON PLU=ON L132 AND (L18 OR L39)
43 SEA ABB=ON PLU=ON L125 OR L133
0 SEA ABB=ON PLU=ON L132 AND ?DEXTRAN?
1 SEA ABB=ON PLU=ON L134 AND ?DEXTRAN?
0 SEA ABB=ON PLU=ON L134 AND ?DEXTRAN?
L131
L132
L133
L134
L135
L136
L137
                 OR "DEX 500"/BI OR "DEXTRAN B 512"/BI OR "DEXTRAN B1355"/BI OR
                 "DEXTRAN D 10"/BI OR "DEXTRAN PL 1S"/BI OR "DEXTRAN PT 25"/BI
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OR "DEXTRAN PVD"/BI OR "DEXTRAN RMI"/BI OR "DEXTRAN T 10"/BI OR "DEXTRAN T 110"/BI OR "DEXTRAN T 150"/BI OR "DEXTRAN T 20"/BI OR "DEXTRAN T 2000"/BI OR "DEXTRAN T 500"/BI OR "DEXTRAN T 70"/BI OR "DEXTRAN 1.5"/BI OR "DEXTRAN 10"/BI OR "DEXTRAN 1000"/BI OR "DEXTRAN 110"/BI OR "DEXTRAN 15"/BI OR "DEXTRAN 150"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 2000"/BI OR "DEXTRAN 40"/BI OR "DEXTRAN 4000"/BI OR "DEXTRAN 45"/BI OR "DEXTRAN 500"/BI OR "DEXTRAN 60"/BI OR "DEXTRAN 70"/BI OR "DEXTRAN 75"/BI OR DEXTRAN/BI OR DEXTRAN/BI OR DEXTRAN/BI OR "G 75"/BI OR GENTRAN/BI OR HEMODEX/BI OR HYSCON/BI OR HYSKON/BI OR INFUCOLL/BI OR INTRADER/BI OR INTRADEX/BI OR LMWD/BI))

L138

O SEA ABB=ON PLU=ON L134 AND (("ACP 10"/BI OR "AGENT AT 717"/BI OR "AGRIMER K 30"/BI OR "AGRIMER 15"/BI OR "AGRIMER 30"/BI OR "AGRIMER 90"/BI OR "ALBIGEN A"/BI OR "ALDACOL Q"/BI OR "ANTARON P 804"/BI OR "ANTITOX VANA"/BI OR "AT 717"/BI OR "B 7509"/BI OR BOLINAN/BI OR "CEVIAN A 88036"/BI OR "DISCOL K 30L"/BI OR "DISINTEX 200"/BI OR "DIVERGAN EF"/BI OR "DIVERGAN F"/BI OR "DIVERGAN RS"/BI OR "GAFTEX AE-K 15"/BI OR "GANEX P 804"/BI OR HEMODESIS/BI OR HEMODEZ/BI OR "K 115 (VINYL POLYMER) "/BI OR "K 115"/BI OR "K 12"/BI OR "K 120 (VINYL POLYMER) "/BI OR "K 120"/BI OR "K 15 (POLYMER) "/BI OR "K 15"/BI OR "K 17"/BI OR "K 25 (SURFACTANT)"/BI OR "K 25"/BI OR "K 29-32"/BI OR "K 30"/BI OR "K 30C"/BI OR "K 60 (POLYMER)"/BI OR "K 60"/BI OR "K 85 (VINYL POLYMER)"/BI OR "K 85"/BI OR "K 90"/BI OR "K 92 (VINYL POLYMER)"/BI OR "K 92"/BI OR "1-VINYL-2-PYRROLIDINONE POLYMER"/BI OR "1-VINYL-2-PYRROLIDONE HOMOPOLYMER "/BI OR "1-VINYL-2-PYRROLIDONE POLYMER"/BI OR 143RP/BI OR "2-PYRROLIDINONE, 1-ETHENYL-, HOMOPOLYMER"/BI OR "2-PYRROLIDINO NE, 1-VINYL-, POLYMERS"/BI OR "40K (VINYL POLYMER)"/BI OR 40K/BI))

L139

O SEA ABB=ON PLU=ON L134 AND ((COLLO-BO/BI OR "E 252"/BI OR NITER/BI OR NITRE/BI OR "NITRIC ACID POTASSIUM SALT (1:1)"/BI OR "NITRIC ACID POTASSIUM SALT"/BI OR "NITRIC ACID, POTASSIUM SALT"/BI OR "POTASSIUM NITRATE"/BI OR SALTPETER/BI))

L140

43 SEA ABB=ON PLU=ON (L134 OR L135 OR L136 OR L137 OR L138 OR L139)
D TRI 1-5

L141

24 SEA ABB=ON PLU=ON L140 AND (AY<2004 OR PY<2004 OR PRY<2004 OR MY<2004 OR REVIEW/DT)
SAVE TEMP L141 ARN930EMB1B/A

L142

19 SEA ABB=ON PLU=ON L140 NOT L141 SAVE TEMP L142 ARN930EMB1A/A

FILE 'STNGUIDE' ENTERED AT 11:07:34 ON 06 FEB 2006

FILE 'APOLLIT' ENTERED AT 11:12:06 ON 06 FEB 2006

FILE 'STNGUIDE' ENTERED AT 11:12:52 ON 06 FEB 2006 D QUE L17

FILE 'REGISTRY' ENTERED AT 11:13:33 ON 06 FEB 2006 L143 0 SEA ABB=ON PLU=ON L17 AND APOLLIT/LC

FILE 'STNGUIDE' ENTERED AT 11:13:46 ON 06 FEB 2006

FILE 'BIOSIS, PASCAL, JICST-EPLUS, CABA, LIFESCI, DRUGU, DRUGB, VETU, VETB, SCISEARCH, CONF, CONFSCI, DISSABS' ENTERED AT 11:14:19 ON 06 FEB 2006

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243 SEA ABB=ON PLU=ON L69
1.144
            14 SEA ABB=ON PLU=ON L144 AND L19
L145
                SAVE TEMP L145 ARN930MULINV/A
     FILE 'BIOSIS' ENTERED AT 11:15:46 ON 06 FEB 2006
L*** DEL 19630 S L13
          8635 SEA ABB=ON PLU=ON L17
L146
          10871 SEA ABB=ON PLU=ON L24
L147
             17 SEA ABB=ON PLU=ON L146 AND L147
L148
             16 SEA ABB=ON PLU=ON L148 AND (AY<2004 OR PY<2004 OR PRY<2004
L149
                OR MY<2004 OR REVIEW/DT)
                SAVE TEMP L149 ARN930BIO1B/A
              1 SEA ABB=ON PLU=ON L148 NOT L149
L150
                SAVE TEMP L150 ARN930BIO1A/A
     FILE 'BIOSIS, PASCAL, JICST-EPLUS, CABA, LIFESCI, DRUGU, DRUGB, VETU,
     VETB, SCISEARCH, CONF, CONFSCI, DISSABS' ENTERED AT 11:18:20 ON 06 FEB
     2006
          48197 SEA ABB=ON PLU=ON (L20 (7A) (L18 OR L39))
L151
          4386 SEA ABB=ON PLU=ON L19 (10A) L20
L152
          11141 SEA ABB=ON PLU=ON L19(10A)(L18 OR L39)
L153
           359 SEA ABB=ON PLU=ON L151 AND L152
L154
            311 SEA ABB=ON PLU=ON L154 AND L153
L155
             5 SEA ABB=ON PLU=ON L155 AND ?DEXTRAN?
L156
              O SEA ABB=ON PLU=ON L155 AND ((A-DEXTRAN/CN OR CDC-H/CN
L157
               OR "DEX 500"/CN OR "DEXTRAN B 512"/CN OR "DEXTRAN B1355"/CN OR
                "DEXTRAN D 10"/CN OR "DEXTRAN PL 1S"/CN OR "DEXTRAN PT 25"/CN
               OR "DEXTRAN PVD"/CN OR "DEXTRAN RMI"/CN OR "DEXTRAN T 10"/CN
               OR "DEXTRAN T 110"/CN OR "DEXTRAN T 150"/CN OR "DEXTRAN T
                20"/CN OR "DEXTRAN T 2000"/CN OR "DEXTRAN T 500"/CN OR
                "DEXTRAN T 70"/CN OR "DEXTRAN 1.5"/CN OR "DEXTRAN 10"/CN OR
                "DEXTRAN 1000"/CN OR "DEXTRAN 10000"/CN OR "DEXTRAN 110"/CN OR
                "DEXTRAN 15"/CN OR "DEXTRAN 150"/CN OR "DEXTRAN 2000"/CN OR
                "DEXTRAN 20000"/CN OR "DEXTRAN 250"/CN OR "DEXTRAN 3000"/CN OR
                "DEXTRAN 40"/CN OR "DEXTRAN 40000"/CN OR "DEXTRAN 45"/CN OR
                "DEXTRAN 500"/CN OR "DEXTRAN 60"/CN OR "DEXTRAN 70"/CN OR
                "DEXTRAN 75"/CN OR DEXTRAN/CN OR DEXTRANEN/CN OR DEXTRANS/CN
                OR DEXTRAVEN/CN OR EUDEXTRAN/CN OR EXPANDEX/CN OR "G 75"/CN OR
                GENTRAN/CN OR HEMODEX/CN OR HYSCON/CN OR HYSKON/CN OR INFUCOLL/
               CN OR INTRADER/CN OR INTRADEX/CN OR LMD/CN OR LMWD/CN))
             17 SEA ABB=ON PLU=ON L155 AND ?PYRROLID?
L158
              O SEA ABB=ON PLU=ON L155 AND (KNO3 OR (POTASSIUM (1A) NITRATE)
L159
               OR SALTPETER OR (SALT(1W) PETER))
            242 SEA ABB=ON PLU=ON L155 AND L19/TI, IT, CC, CT, ST, STP
L160
L161
            244 SEA ABB=ON PLU=ON L155 AND L20/TI, IT, CC, CT, ST, STP
            209 SEA ABB=ON PLU=ON L160 AND L161
L162
            173 SEA ABB=ON PLU=ON L162 AND (L18/TI,IT,CC,CT,ST,STP OR
L163
               L39/TI, IT, CC, CT, ST, STP)
L164
              8 SEA ABB=ON PLU=ON L163 AND (?DELIVER? OR ?RELEAS?)
               D OUE
             2 SEA ABB=ON PLU=ON L163 AND (?DRUG OR ?PHARM? OR ?THERAP?)
L165
             8 SEA ABB=ON PLU=ON L163 AND (?ADMIN? OR ?TREAT?)
L166
L167
             38 SEA ABB=ON PLU=ON L156 OR L158 OR L159 OR (L164 OR L165 OR
               L166)
             16 SEA ABB=ON PLU=ON L167 AND (AY<2004 OR PY<2004 OR PRY<2004
L168
                OR MY<2004 OR REVIEW/DT)
                SAVE TEMP L168 ARN930MUL1B/A
             22 SEA ABB=ON PLU=ON L167 NOT L168
L169
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SAVE TEMP L169 ARN930MUL1A/A

FILE 'STNGUIDE' ENTERED AT 11:41:13 ON 06 FEB 2006

FILE 'HCAPLUS' ENTERED AT 11:43:42 ON 06 FEB 2006 L170 1 SEA ABB=ON PLU=ON L1 AND L8

FILE 'STNGUIDE' ENTERED AT 11:43:51 ON 06 FEB 2006

- D QUE STAT L66
- D OUE STAT L82
- D QUE STAT L86
- D QUE STAT L118
- D QUE STAT L141
- D QUE STAT L168
- D OUE STAT L149

FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' ENTERED AT 11:45:40 ON 06 FEB 2006

L171 103 DUP REM L66 L82 L86 L118 L141 L168 L149 (19 DUPLICATES REMOVED)

ANSWERS '1-13' FROM FILE HCAPLUS

ANSWERS '14-16' FROM FILE WPIX

ANSWERS '17-44' FROM FILE USPATFULL

ANSWER '45' FROM FILE USPAT2

ANSWERS '46-60' FROM FILE MEDLINE

ANSWERS '61-77' FROM FILE EMBASE

ANSWERS '78-94' FROM FILE BIOSIS

ANSWERS '95-98' FROM FILE PASCAL

ANSWERS '99-101' FROM FILE JICST-EPLUS

ANSWERS '102-103' FROM FILE SCISEARCH

FILE 'STNGUIDE' ENTERED AT 11:45:50 ON 06 FEB 2006

FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' ENTERED AT 11:46:22 ON 06 FEB 2006

D IBIB ED AB HITIND HITSTR

FILE 'STNGUIDE' ENTERED AT 11:46:36 ON 06 FEB 2006

FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' ENTERED AT 11:46:47 ON 06 FEB 2006

D IBIB ED AB HITIND HITSTR 2-13

FILE 'STNGUIDE' ENTERED AT 11:47:15 ON 06 FEB 2006

FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' ENTERED AT 11:47:52 ON 06 FEB 2006

D IALL ABEQ TECH ABEX 14-16

FILE 'STNGUIDE' ENTERED AT 11:47:54 ON 06 FEB 2006

FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' ENTERED AT 11:48:43 ON 06 FEB 2006

D IBIB AB HITSTR 17-45

FILE 'STNGUIDE' ENTERED AT 11:49:14 ON 06 FEB 2006

FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, MEDLINE, EMBASE, BIOSIS, PASCAL, JICST-EPLUS, SCISEARCH' ENTERED AT 11:49:31 ON 06 FEB 2006

D IBIB ED AB HITIND 46-103

FILE 'STNGUIDE' ENTERED AT 11:49:38 ON 06 FEB 2006 D OUE STAT L8

- D QUE STAT L72
- D QUE STAT L89
- D QUE STAT L121
- D QUE STAT L145

FILE 'HCAPLUS, WPIX, MEDLINE, EMBASE, BIOSIS, PASCAL, DRUGB, SCISEARCH' ENTERED AT 11:52:34 ON 06 FEB 2006

L172

21 DUP REM L8 L72 L89 L121 L145 (9 DUPLICATES REMOVED)

ANSWERS '1-6' FROM FILE HCAPLUS

ANSWER '7' FROM FILE WPIX

ANSWERS '8-10' FROM FILE MEDLINE

ANSWERS '11-14' FROM FILE BIOSIS

ANSWER '15' FROM FILE PASCAL

ANSWERS '16-19' FROM FILE DRUGB

ANSWERS '20-21' FROM FILE SCISEARCH

FILE 'STNGUIDE' ENTERED AT 11:52:42 ON 06 FEB 2006

FILE 'HCAPLUS, WPIX, MEDLINE, BIOSIS, PASCAL, DRUGB, SCISEARCH' ENTERED AT 11:52:56 ON 06 FEB 2006

D IBIB ED AB L172 1021

FILE 'STNGUIDE' ENTERED AT 11:53:11 ON 06 FEB 2006

FILE 'STNGUIDE' ENTERED AT 11:54:50 ON 06 FEB 2006

FILE HOME 

FILE HCAPLUS -

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FILE COVERS 1907 - 6 Feb 2006 VOL 144 ISS 7 FILE LAST UPDATED: 5 Feb 2006 (20060205/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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FILE-STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 3, 2006 (20060203/UP).

FILE\_WPIX\_\_\_

FILE LAST UPDATED:

1 FEB 2006 <20060201/UP>

MOST RECENT DERWENT UPDATE: 200608 <200608/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training center/patents/stn guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://scientific.thomson.com/support/patents/coverage/latestupdates/

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT:

http://scientific.thomson.com/support/products/dwpi/

>>> FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT
DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
FIRST VIEW - FILE WPIFV.
FOR FURTHER DETAILS:

http://scientific.thomson.com/support/products/dwpifv/

>>> THE CPI AND EPI MANUAL CODES WILL BE REVISED FROM UPDATE 200601. PLEASE CHECK:

http://scientific.thomson.com/support/patents/dwpiref/reftools/classificat

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE http://www.stn-international.de/stndatabases/details/ipc\_reform.html and http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf <<<

#### FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 FEB 2006 HIGHEST RN 873536-40-4 DICTIONARY FILE UPDATES: 5 FEB 2006 HIGHEST RN 873536-40-4

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*\*

\* The CA roles and document type information have been removed from \*

\* the IDE default display format and the ED field has been added, \*

\* effective March 20, 2005. A new display format, IDERL, is now \*

\* available and contains the CA role and document type information. \*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

# FILE ZCAPLUS

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FILE COVERS 1907 - 6 Feb 2006 VOL 144 ISS 7 FILE LAST UPDATED: 5 Feb 2006 (20060205/ED)

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FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 2 Feb 2006 (20060202/PD)

FILE LAST UPDATED: 2 Feb 2006 (20060202/ED)

HIGHEST GRANTED PATENT NUMBER: US6993790

HIGHEST APPLICATION PUBLICATION NUMBER: US2006026727

CA INDEXING IS CURRENT THROUGH 2 Feb 2006 (20060202/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 2 Feb 2006 (20060202/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2005

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2005

# FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 2 Feb 2006 (20060202/PD)
FILE LAST UPDATED: 2 Feb 2006 (20060202/ED)
HIGHEST GRANTED PATENT NUMBER: US2005105988
HIGHEST APPLICATION PUBLICATION NUMBER: US2006025907
CA INDEXING IS CURRENT THROUGH 2 Feb 2006 (20060202/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 2 Feb 2006 (20060202/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2005

FILE MEDLINE FILE-LAST-UPDATED: 4 FEB 2006 (20060204/UP). FILE COVERS 1950 TO DATE.

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 will soon be available. For details on the 2005 reload, enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/ http://www.nlm.nih.gov/pubs/techbull/nd04/nd04\_mesh.html http://www.nlm.nih.gov/pubs/techbull/nd05/nd05\_med\_data\_changes.html http://www.nlm.nih.gov/pubs/techbull/nd05/nd05\_2006\_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate

## E. Arnold 10/825,930

FILE EMBASE

FILE COVERS 1974 TO 2 Feb 2006 (20060202/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE APOLLIT

FILE LAST UPDATED: 22 DEC 2005 <20051222/UP>

FILE COVERS 1973 TO 2005

THE APOLLIT FILE IS NO LONGER BEING UPDATED. \*\*\*\*\*

\*\* USE FILE RAPRA FOR UP-TO-DATE POLYMER INFORMATION \*\*

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 1 February 2006 (20060201/ED)

FILE PASCAL

FILE LAST UPDATED: 6 FEB 2006 <20060206/UP>

FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <><

FILE JICST-EPLUS

FILE COVERS 1985 TO 31 JAN 2006 (20060131/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE CABA

FILE COVERS 1973 TO 3 Feb 2006 (20060203/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The CABA file was reloaded 7 December 2003. Enter HELP RLOAD for details.

FILE LIFESCI

FILE COVERS 1978 TO 18 Jan 2006 (20060118/ED)

FILE DRUGU

FILE LAST UPDATED: 31 JAN 2006 <20060131/UP>

>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

FILE DRUGB

>>> FILE COVERS 1964 TO 1982 - CLOSED FILE <<<

FILE VETU

#### E. Arnold 10/825,930

FILE LAST UPDATED: 02 JAN 2002

<20020102/UP>

FILE COVERS 1983-2001

FILE VETB

FILE LAST UPDATED: 25 SEP 94 <940925/UP>

FILE COVERS 1968-1982

FILE SCISEARCH

FILE COVERS 1974 TO 2 Feb 2006 (20060202/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE CONF

FILE LAST UPDATED: 23 DEC 2005

<20051223/UP>

FILE COVERS 1976 TO 2005.

<>< CONF IS NO LONGER BEING UPDATED AS OF JANUARY 2006 >>>

\_\_\_\_\_ FILE CONFSCI

FILE COVERS 1973 TO 25 May 2005 (20050525/ED)

FILE DISSABS ?

=>

FILE COVERS 1861 TO 26 JAN 2006 (20060126/ED)

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searched by D. Arnold 571-272-2532

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